

December 30, 2002

RE: T 093 - 5990 - 00002 Lehigh Cement Company

TO: Interested Parties / Applicant

FROM: Paul Dubenetzky
Chief, Permits Branch
Office of Air Quality

Notice of Decision - Approval - Effective Immediately

Please be advised that on behalf of the Commissioner of the Department of Environmental Management, I have issued a decision regarding the enclosed matter. Pursuant to IC 13-15-5-3, this permit is effective immediately, unless a petition for stay of effectiveness is filed and granted, and may be revoked or modified in accordance with the provisions of IC 13-15-7-1.

If you wish to challenge this decision, IC 4-21.5-3-7 and IC 13-15-6-1(b) require that you file a petition for administrative review. This petition may include a request for stay of effectiveness and must be submitted to the Office of Environmental Adjudication, ISTA Building, 150 W. Market Street, Suite 618, Indianapolis, Indiana 46204, **within thirty (30) days from the date of this notice**. The filing for administrative review is complete on the earliest of the following dates that apply to the filing:

- (1) the date the document is delivered to the Office of Environmental Adjudication (OEA);
- (2) the date of the postmark on the envelope containing the document, if the document is mailed to OEA by U.S. mail; or
- (3) the date on which the document is deposited with a private carrier, as shown by receipt issued by the carrier, if the document is sent to the OEA by private carrier.

The petition must include facts demonstrating that you are either the applicant, a person aggrieved or adversely affected by the decision or otherwise entitled to review by law. Please identify the permit, decision or other order for which you seek review by permit number, the name of the applicant, location, the date of this notice, and all of the following:

- (1) the name and address of the person making the request;
- (2) the interest of the person making the request;
- (3) identification of any persons represented by the person making the request;
- (4) the reasons, with particularity, for the request;
- (5) the issues, with particularity, proposed for consideration at any hearing; and
- (6) identification of the terms and conditions which, in the judgment of the person making the request, would be appropriate in the case in question to satisfy the requirements of the law governing documents of the type issued by the Commissioner.

(over)

Pursuant to 326 IAC 2-7-18(d), any person may petition the U.S. EPA to object to the issuance of a Title V operating permit or modification within sixty (60) days of the end of the forty-five (45) day EPA review period. Such an objection must be based only on issues that were raised with reasonable specificity during the public comment period, unless the petitioner demonstrates that it was impracticable to raise such issues, or if the grounds for such objection arose after the comment period.

To petition the U.S. EPA to object to the issuance of a Title V operating permit, contact:

U.S. Environmental Protection Agency
Administrator, Christine Todd Whitman
401 M Street
Washington, D.C. 20406

If you have technical questions regarding the enclosed documents, please contact the Office of Air Quality, Permits Branch at (317) 233-0178. Callers from within Indiana may call toll-free at 1-800-451-6027, ext. 3-0178.

Enclosures

FNTVOP.WPD
8-21-02

PART 70 OPERATING PERMIT OFFICE OF AIR QUALITY

**Lehigh Portland Cement Company
121 North First Street
Mitchell, Indiana 47446**

(herein known as the Permittee) is hereby authorized to operate subject to the conditions contained herein, the source described in Section A (Source Summary) of this permit.

This permit is issued in accordance with 326 IAC 2 and 40 CFR Part 70 Appendix A and contains the conditions and provisions specified in 326 IAC 2-7 as required by 42 U.S.C. 7401, et. seq. (Clean Air Act as amended by the 1990 Clean Air Act Amendments), 40 CFR Part 70.6, IC 13-15 and IC 13-17.

Operation Permit No.: T093-5990-00002	
Issued by: Original Signed by Janet McCabe Janet G. McCabe, Assistant Commissioner Office of Air Quality	Issuance Date: December 30, 2002 Expiration Date: December 30, 2007

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Quarterly Report

Quarterly Deviation and Compliance Monitoring Report

SECTION A

SOURCE SUMMARY

This permit is based on information requested by the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ). The information describing the source contained in conditions A.1 through A.3 and the facility/emissions unit description boxes in Sections D of the permit, is descriptive information and does not constitute enforceable conditions. However, the Permittee should be aware that a physical change or a change in the method of operation that may render this descriptive information obsolete or inaccurate may trigger requirements for the Permittee to obtain additional permits or seek modification of this permit pursuant to 326 IAC 2, or change other applicable requirements presented in the permit application.

A.1 General Information [326 IAC 2-7-4(c)] [326 IAC 2-7-5(15)] [326 IAC 2-7-1(22)]

The Permittee owns and operates a portland cement manufacturing plant.

Responsible Official:	Plant Manager
Source Address:	121 North First Street, Mitchell, Indiana 47446
Mailing Address:	121 North First Street, P.O. Box 97, Mitchell, Indiana 47446
Phone Number:	(812) 849-2191
SIC Code:	3241
County Location:	Lawrence
Source Location Status:	Attainment or unclassified for all criteria pollutants
Source Status:	Part 70 Permit Program Major Source under PSD Rules Major Source, Section 112 of the Clean Air Act One of the 28 listed source categories

A.2 Emission Units and Pollution Control Equipment Summary [326 IAC 2-7-4(c)(3)] [326 IAC 2-7-5(15)]

This stationary source consists of the following emission units and pollution control devices:

The quarry activities, as follows:

- (a) Drilling/blasting, hauling, handling and storage, identified as F01, commenced prior to 1971, with associated fugitive particulate matter (PM) emissions.

The quarry material sizing facilities/emissions units, as follows:

- (b) One (1) primary crusher, identified as EU01, constructed in 1965, with a nominal rate of 975 tons per hour, with PM emissions controlled by one (1) baghouse, identified as QDC2, and exhausting to one (1) stack, identified as S-QDC2.
- (c) One (1) surge bin and transfer system, identified as EU02, constructed in 1965, with a nominal rate of 975 tons per hour, with PM emissions controlled by one (1) baghouse, identified as QDC3, and exhausting to one (1) stack, identified as S-QDC3.
- (d) One (1) secondary crusher, identified as EU03, constructed in 1965, with a nominal rate of 975 tons per hour, with PM emissions controlled by one (1) baghouse, identified as QDC4, and exhausting to one (1) stack, identified as S-QDC4.
- (e) One (1) tertiary crusher, identified as EU04, constructed in 1965, with a nominal rate of 975 tons per hour, with PM emissions controlled by one (1) baghouse, identified as QDC4, and exhausting to one (1) stack, identified as S-QDC4.
- (f) One (1) north screen house, identified as EU05, constructed in 1965, with a nominal rate

of 975 tons per hour, with PM emissions controlled by one (1) baghouse, identified as QDC5, and exhausting to one (1) stack, identified as S-QDC5.

- (g) One (1) south screen house, identified as EU06, constructed in 1965, with a nominal rate of 975 tons per hour, with PM emissions controlled by one (1) baghouse, identified as QDC6, and exhausting to one (1) stack, identified as S-QDC6.
- (h) One (1) belt #7 to belt #8 conveyor transfer point, identified as EU07, constructed in 1965, with a nominal rate of 975 tons per hour, with PM emissions controlled by one (1) baghouse, identified as QDC7, and exhausting to one (1) stack, identified as S-QDC7.
- (i) One (1) belt #8 to belt #9 conveyor transfer point, identified as EU08, constructed in 1965, with a nominal rate of 975 tons per hour, with PM emissions controlled by one (1) baghouse, identified as QDC8, and exhausting to one (1) stack, identified as S-QDC8.
- (j) One (1) belt #9 to belt #10 conveyor transfer point, identified as F02, constructed in 1965, with a nominal rate of 975 tons per hour, using seasonal water suppression to control PM emissions, and exhausting directly to the atmosphere.

The cement kiln dust storage, disposal, mining, and handling facilities/emissions units, as follows:

- (k) One (1) cement kiln dust (CKD) bin, identified as EU24, constructed in 1959, with a nominal rate of 100 tons per hour, with PM emissions controlled by one (1) baghouse, identified as KDC7, and exhausting to one (1) stack, identified as S-KDC7.
- (l) One (1) CKD truck unloading system, identified as EU24A, constructed in 1959, with a nominal rate of 60 tons per hour, with PM emissions controlled by one (1) baghouse, identified as KDC7A, and exhausting to one (1) stack, identified as S-KDC7A.
- (m) One (1) CKD mixer, identified as EU24B, constructed in 1999, with a nominal rate of 104 tons per hour, with PM emissions controlled by one (1) baghouse, identified as KDC7B, and exhausting to one (1) stack, identified as S-KDC7B.
- (n) One (1) CKD truck loadout, identified as F07, constructed in 1999, with a nominal rate of 104 tons per hour, with PM emissions uncontrolled, and exhausting directly to the atmosphere.
- (o) CKD disposal and mining facilities, identified as F05, constructed in 1999, with particulate matter emissions uncontrolled, and exhausting directly to the atmosphere.

The raw material handling and storage facilities/emissions units, as follows:

- (p) A conveying system to transport raw material to storage, identified as EU09, constructed in 1960, with a nominal rate of 200 tons per hour, with PM emissions controlled by one (1) baghouse, identified as RMDC1, and exhausting to one (1) stack, identified as S-RMDC1.
- (q) One (1) shale crusher, identified as EU10, constructed in 1961, with a nominal rate of 200 tons per hour, with PM emissions controlled by one (1) baghouse, identified as RMDC2, and exhausting to one (1) stack, identified as S-RMDC2.
- (r) One (1) material storage building, identified as F03, constructed in 1959-1960, with fugitive emissions from various conveyors and storage piles controlled by partial enclosure and exhausting directly to the atmosphere.

- (s) One (1) coal unloading building, identified as F08, constructed in 1960, with particulate matter emissions controlled by partial enclosure and exhausting directly to the atmosphere.
- (t) One (1) coal pile, identified as F04, storage commencing prior to 1971, with particulate matter emissions uncontrolled, and exhausting directly to the atmosphere.
- (u) Raw material stockpiles collectively, identified as F09, storage commencing prior to 1971, used for temporary storage of various feed materials, including gypsum, foundry sand, mill scale, and slag, with particulate matter emissions uncontrolled, and exhausting to the atmosphere.

The raw mill facilities/emissions units, as follows:

- (v) One (1) coal-fired stoker for backup heat supply for the raw mills, identified as EU11B and EU12B, constructed in 1977, with natural gas-fired burners installed in 1999, identified as EU11A and EU12A, with a heat input rate of 37 million British thermal units (MMBtu) per hour, and exhausting to the raw mills. A bypass stack will be used during startup, shutdown, and malfunction periods.
- (w) One (1) raw mill #1, identified as EU11, constructed in 1961, with a nominal rate of 100 tons per hour and including a natural gas-fired burner, identified as EU11A, with a maximum heat input rate of 20 million British thermal units (MMBtu) per hour, with PM emissions controlled by one (1) baghouse, identified as RMDC3, and exhausting to one (1) stack, identified as S-RMDC3.
- (x) One (1) raw mill #2, identified as EU12, constructed in 1961, with a nominal rate of 100 tons per hour and including a natural gas-fired burner, identified as EU12A, with a maximum heat input rate of 20 million British thermal units (MMBtu) per hour, with PM emissions controlled by one (1) baghouse, identified as RMDC4, and exhausting to one (1) stack, identified as S-RMDC4.

The raw mill storage facilities/emissions units, as follows:

- (y) Blending bins, identified as EU13, constructed in 1961, with a combined nominal rate of 250 tons per hour, with PM emissions controlled by two (2) baghouses, identified as RMDC5 and RMDC6, and each exhausting to separate stacks, identified as S-RMDC5 and S-RMDC6, respectively.
- (z) Kiln supply silos, identified as EU14, constructed in 1961, with a combined nominal rate of 250 tons per hour, with PM emissions controlled by two (2) baghouses, identified as RMDC7 and RMDC8, and each exhausting to separate stacks, identified as S-RMDC7 and S-RMDC8, respectively.
- (aa) One (1) kiln feed bin #1, identified as EU18, constructed in 1959, with a nominal rate of 66 tons per hour, with PM emissions controlled by one (1) baghouse, identified as KDC1, and exhausting to one (1) stack, identified as S-KDC1.
- (bb) One (1) kiln feed bin #2, identified as EU20, constructed in 1959, with a nominal rate of 66 tons per hour, with PM emissions controlled by one (1) baghouse, identified as KDC3, and exhausting to one (1) stack, identified as S-KDC3.
- (cc) One (1) kiln feed bin #3, identified as EU22, constructed in 1974, with a nominal rate of 73 tons per hour, with PM emissions controlled by one (1) baghouse, identified as KDC5,

and exhausting to one (1) stack, identified as S-KDC5.

The clinker handling facilities/emissions units, as follows:

- (dd) One (1) south storage drag, identified as EU25, constructed in 1974, with a nominal rate of 120 tons per hour, with PM emissions controlled by one (1) baghouse, identified as FDC1, and exhausting to one (1) stack, identified as S-FDC1.
- (ee) One (1) north clinker tower, identified as EU26a, constructed in 1959, with a nominal rate of 120 tons per hour, with PM emissions controlled by one (1) baghouse, identified as FDC2, and exhausting to one (1) stack, identified as S-FDC2.
- (ff) One (1) North storage drag, identified as EU26b, constructed in 1959, with a nominal rate of 120 tons per hour, with PM emissions controlled by one (1) baghouse, identified as FDC2, and exhausting to one (1) stack, identified as S-FDC2.
- (gg) One (1) scrap bin clinker ladder, identified as EU26c, constructed in 1993, with a nominal rate of 120 tons per hour, with PM emissions controlled by one (1) baghouse, identified as FDC2, and exhausting to one (1) stack, identified as S-FDC2.
- (hh) One (1) south clinker tower, identified as EU27, constructed in 1974, with a nominal rate of 120 tons per hour, with PM emissions controlled by one (1) baghouse, identified as FDC3, and exhausting to one (1) stack, identified as S-FDC3.
- (ii) One (1) hot spout clinker ladder, identified as EU28, constructed in 1993, with a nominal rate of 120 tons per hour, with PM emissions controlled by one (1) baghouse, identified as FDC4, and exhausting to one (1) stack, identified as S-FDC4.
- (jj) One (1) pan clinker conveyor, identified as EU29, constructed in 1979, with a nominal rate of 120 tons per hour, with PM emissions controlled by one (1) baghouse, identified as FDC5, and exhausting to one (1) stack, identified as S-FDC5.
- (kk) One (1) east clinker ladder, identified as EU30, constructed in 1993, with a nominal rate of 120 tons per hour, with PM emissions controlled by one (1) baghouse, identified as FDC6, and exhausting to one (1) stack, identified as S-FDC6.
- (ll) One (1) roll crusher, identified as EU31, constructed in 1987, with a nominal rate of 240 tons per hour, with PM emissions controlled by one (1) baghouse, identified as FDC7, and exhausting to one (1) stack, identified as S-FDC7.

Note: The scrap bin clinker ladder (EU26c), the hot spout clinker ladder (EU28), and the east clinker ladder (EU30) are not emission units; they are flaps which are used to reduce the drop heights from the north clinker tower, the south clinker tower, and the north storage drag, respectively, which reduce particulate emissions.

The finish mill facilities/emissions units, as follows:

- (mm) One (1) finish mill #1 with associated feed bin, identified as EU32, constructed in 1959, with a nominal rate of 37 tons per hour, with PM emissions controlled by one (1) baghouse, identified as FDC8, and exhausting to one (1) stack, identified as S-FDC8.
- (nn) One (1) finish mill #2 with associated feed bin, identified as EU33, constructed in 1959, with a nominal rate of 37 tons per hour, with PM emissions controlled by one (1) baghouse, identified as FDC9, and exhausting to one (1) stack, identified as S-FDC9.
- (oo) One (1) finish mill #3 with associated feed bin, identified as EU34, constructed in 1959,

with a nominal rate of 37 tons per hour, with PM emissions controlled by one (1) baghouse, identified as FDC10, and exhausting to one (1) stack, identified as S-FDC10.

- (pp) One (1) finish mill #4 with associated feed bin, identified as EU35, constructed in 1974, with a nominal rate of 50 tons per hour, with PM emissions controlled by one (1) baghouse, identified as FDC11, and exhausting to one (1) stack, identified as S-FDC11.
- (qq) One (1) finish mill #4 separator, identified as EU36, constructed in 1989, with a nominal rate of 50 tons per hour, with PM emissions controlled by one (1) baghouse, identified as FDC12, and exhausting to one (1) stack, identified as S-FDC12.
- (rr) One (1) lime bin, identified as EU38, constructed in 1993, with a nominal rate of 6 tons per hour, with PM emissions controlled by one (1) baghouse, identified as FDC14, and exhausting to one (1) stack, identified as S-FDC14.

The finish material storage facilities/emissions units, as follows:

- (ss) One (1) surge bin, identified as EU37, constructed in 1959, with a nominal rate of 35 tons per hour, with PM emissions controlled by one (1) baghouse, identified as FDC13, and exhausting to one (1) stack, identified as S-FDC13.
- (tt) A north and south silo operation consisting of thirty (30) storage silos, identified as EU39A and EU39B, constructed in 1959, with a nominal rate of 60 tons per hour, with PM emissions controlled by two (2) baghouses, identified as SDC1 and SDC2, and exhausting to two (2) stacks, identified as S-SDC1 and S-SDC2, respectively.
- (uu) A silo transfer system, identified as EU40A and EU40B, constructed in 1959, with a nominal rate of 300 tons per hour, with PM emissions controlled by two (2) baghouses, identified as SDC3 and SDC4, and exhausting to two (2) stacks, identified as S-SDC3 and S-SDC4, respectively.

The bulk loading and packaging facilities/emissions units, as follows:

- (vv) One (1) east truck loadout bin, identified as EU41, constructed in 1959, with a nominal rate of 450 tons per hour, with PM emissions controlled by one (1) baghouse, identified as SDC5, and exhausting to one (1) stack, identified as S-SDC5.
- (ww) One (1) east truck vacuolader, identified as EU42, constructed in 1959, with a nominal rate of 450 tons per hour, with PM emissions controlled by one (1) baghouse, identified as SDC6, and exhausting to one (1) stack, identified as S-SDC6.
- (xx) One (1) west truck loadout bin, identified as EU43, constructed in 1959, with a nominal rate of 450 tons per hour, with PM emissions controlled by one (1) baghouse, identified as SDC7, and exhausting to one (1) stack, identified as S-SDC7.
- (yy) One (1) west truck vacuolader, identified as EU44, constructed in 1959, with a nominal rate of 450 tons per hour, with PM emissions controlled by one (1) baghouse, identified as SDC8, and exhausting to one (1) stack, identified as S-SDC8.
- (zz) One (1) truck loadout station, identified as F06, constructed in 1959, with a nominal rate of 30 tons per hour, and exhausting directly to the atmosphere.
- (aaa) One (1) railroad loadout bin, identified as EU45, constructed in 1959, with a nominal rate of 240 tons per hour, with PM emissions controlled by one (1) baghouse, identified as SDC9, and exhausting to one (1) stack, identified as S-SDC9.

- (bbb) One (1) articuloader, identified as EU46, constructed in 1959, with a nominal rate of 240 tons per hour, with PM emissions controlled by one (1) baghouse, identified as SDC10, and exhausting to one (1) stack, identified as S-SDC10.
- (ccc) One (1) packing machine, identified as EU47, constructed in 1984, with a nominal rate of 40 tons per hour, with PM emissions controlled by two (2) baghouses, identified as SDC11 and SDC12, and exhausting to two (2) stacks, identified as S-SDC11 and S-SDC12, respectively.

The kiln facilities/emissions units, as follows:

- (ddd) One (1) kiln #1, identified as EU15, constructed in 1959, with a heat input rate of 118 million Btu per hour, with a nominal production rate of 38 tons per hour, with PM emissions controlled by one (1) electrostatic precipitator (ESP), identified as KP1, and exhausting to one (1) stack, identified as S-KP1. Kiln #1 is also permitted to use a blended fuel of coal and pressed paper making waste where the blend has a maximum of 20% pressed paper making waste by heat input.
- (eee) One (1) kiln #2, identified as EU16, constructed in 1959, with a heat input rate of 118 million Btu per hour, with a nominal production rate of 38 tons per hour, with PM emissions controlled by one (1) electrostatic precipitator (ESP), identified as KP2, and exhausting to one (1) stack, identified as S-KP1. Kiln #2 is also permitted to use a blended fuel of coal and pressed paper making waste where the blend has a maximum of 20% pressed paper making waste by heat input.
- (fff) One (1) kiln #3, identified as EU17, constructed in 1974, with a heat input rate of 118 million Btu per hour, with a nominal production rate of 43 tons per hour, with PM emissions controlled by one (1) electrostatic precipitator (ESP), identified as KP3, and exhausting to one (1) stack, identified as S-KP2. Kiln #3 is also permitted to use a blended fuel of coal and pressed paper making waste where the blend has a maximum of 20% pressed paper making waste by heat input.

The clinker cooler facilities/emissions units, as follows:

- (ggg) One (1) clinker cooler #1, identified as EU19, constructed in 1959, with a nominal rate of 38 tons per hour, with PM emissions controlled by one (1) baghouse, identified as KDC2, and exhausting to one (1) stack, identified as S-KDC2.
- (hhh) One (1) clinker cooler #2, identified as EU21, constructed in 1959, with a nominal rate of 38 tons per hour, with PM emissions controlled by one (1) baghouse, identified as KDC4, and exhausting to one (1) stack, identified as S-KDC4.
- (iii) One (1) clinker cooler #3, identified as EU23, constructed in 1974, with a nominal rate of 43 tons per hour, with PM emissions controlled by one (1) baghouse, identified as KDC6, and exhausting to one (1) stack, identified as S-KDC6.

A.3 Specifically Regulated Insignificant Activities [326 IAC 2-7-1(21)] [326 IAC 2-7-4(c)]
[326 IAC 2-7-5(15)]

-
- (1) This stationary source includes the following specifically regulated insignificant activities:
 - (a) Degreasing operations that do not exceed 145 gallons per 12 months, except if subject to 326 IAC 20-6. [326 IAC 8-3-2] [326 IAC 8-3-5]
 - (b) Portable welding. [326 IAC 6-3-2]
 - (c) refractory work. [326 IAC 6-3-2]

- (2) This stationary source also includes the following insignificant activities, as defined in 326 IAC 2-7-1(21):
- (a) Space heaters, process heaters, or boilers using the following fuels:
 - (1) Natural gas-fired combustion sources with heat input equal to or less than ten million (10,000,000) Btu per hour.
 - (2) Fuel oil-fired combustion sources with heat input equal to or less than two million (2,000,000) Btu per hour and firing fuel containing less than five-tenths (0.5) percent sulfur by weight.
 - (b) A gasoline fuel transfer and dispensing operation handling less than or equal to 1,300 gallons per day, such as filling of tanks, locomotives, automobiles, having a storage capacity less than or equal to 10,500 gallons.
 - (c) The following VOC and HAP storage containers:
 - (1) Storage tanks with capacity less than or equal to 1,000 gallons and annual throughput less than 12,000 gallons.
 - (2) Vessels storing lubricating oils, hydraulic oils, machining oils, and machining fluids.
 - (d) Refractory storage not requiring air pollution control equipment.
 - (e) Application of oils, greases, lubricants, or other nonvolatile materials applied as temporary protective coatings.
 - (f) Replacement or repair of electrostatic precipitators, bags in baghouses and filters in other air filtration equipment.
 - (g) Heat exchanger cleaning and repair.
 - (h) Paved and unpaved roads and parking lots with public access.
 - (i) Underground conveyors with PM controlled by total enclosure.
 - (j) On-site fire and emergency response training approved by the department.
 - (k) Emergency generators as follows:
 - (1) Gasoline generators not exceeding 110 horsepower.
 - (2) Diesel generators not exceeding 1600 horsepower.
 - (l) Stationary fire pumps.
 - (m) A laboratory as defined in 326 IAC 2-7-1 (21)(D).
 - (n) Other categories with emissions below insignificant thresholds as follows:
 - (1) Two (2) grinding aid storage tanks.
 - (2) Three (3) Airalon/Airplas storage tanks.

- (3) Three (3) coal mills, with nominal rates of 5, 6, and 6 tons per hour, with particulate matter controlled by total enclosure.
- (4) One coal feeder conveyor and one coal unloading conveyor, with nominal rates of 250 tons per hour and 260 tons per hour, respectively, constructed prior to August 17, 1971, with particulate matter emissions controlled by total enclosure.

A.4 Part 70 Permit Applicability [326 IAC 2-7-2]

This stationary source is required to have a Part 70 permit by 326 IAC 2-7-2 (Applicability) because:

- (a) It is a major source, as defined in 326 IAC 2-7-1(22); and
- (b) It is a source in a source category designated by the United States Environmental Protection Agency (U.S. EPA) under 40 CFR 70.3 (Part 70 - Applicability).

SECTION B

GENERAL CONDITIONS

B.1 Definitions [326 IAC 2-7-1]

Terms in this permit shall have the definition assigned to such terms in the referenced regulation. In the absence of definitions in the referenced regulation, the applicable definitions found in the statutes or regulations (IC 13-11, 326 IAC 1-2 and 326 IAC 2-7) shall prevail.

B.2 Permit Term [326 IAC 2-7-5(2)] [326 IAC 2-1.1-9.5]

This permit is issued for a fixed term of five (5) years from the issuance date of this permit, as determined in accordance with IC 4-21.5-3-5(f) and IC 13-15-5-3. Subsequent revisions, modifications, or amendments to this permit do not affect the expiration date.

B.3 Enforceability [326 IAC 2-7-7]

Unless otherwise stated, all terms and conditions in this permit except the facility/emissions unit descriptions contained in Sections A.1 through A.3 and Sections D, including any provisions designed to limit the source's potential to emit, are enforceable by IDEM, the United States Environmental Protection Agency (U.S. EPA) and citizens in accordance with the Clean Air Act.

B.4 Termination of Right to Operate [326 IAC 2-7-10] [326 IAC 2-7-4(a)]

The Permittee's right to operate this source terminates with the expiration of this permit unless a timely and complete renewal application is submitted at least nine (9) months prior to the date of expiration of the source's existing permit, consistent with 326 IAC 2-7-3 and 326 IAC 2-7-4(a).

B.5 Severability [326 IAC 2-7-5(5)]

The provisions of this permit are severable; a determination that any portion of this permit is invalid shall not affect the validity of the remainder of the permit.

B.6 Property Rights or Exclusive Privilege [326 IAC 2-7-5(6)(D)]

This permit does not convey any property rights of any sort, or any exclusive privilege.

B.7 Duty to Supplement and Provide Information [326 IAC 2-7-4(b)] [326 IAC 2-7-5(6)(E)] [326 IAC 2-7-6(6)]

- (a) The Permittee, upon becoming aware that any relevant facts were omitted or incorrect information was submitted in the permit application, shall promptly submit such supplementary facts or corrected information to:

Indiana Department of Environmental Management
Permits Branch, Office of Air Quality
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

The submittal by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (b) The Permittee shall furnish to IDEM, OAQ, within a reasonable time, any information that IDEM, OAQ, may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. The submittal by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34). Upon request, the Permittee shall also furnish to IDEM, OAQ copies of records required to be kept by this permit or, for information claimed to be confidential, the Permittee may furnish such records directly to the U.S. EPA along with a claim of confidentiality. [326 IAC 2-7-5(6)(E)]
- (c) The Permittee may include a claim of confidentiality in accordance with 326 IAC 17.1.

When furnishing copies of requested records directly to U. S. EPA, the Permittee may assert a claim of confidentiality in accordance with 40 CFR 2, Subpart B.

B.8 Compliance with Permit Conditions [326 IAC 2-7-5(6)(A)] [326 IAC 2-7-5(6)(B)]

- (a) The Permittee must comply with all conditions of this permit. Noncompliance with any provisions of this permit is grounds for:
 - (1) Enforcement action;
 - (2) Permit termination, revocation and reissuance, or modification; or
 - (3) Denial of a permit renewal application.
- (b) Noncompliance with any provisions of this permit, except any provision specifically designated as not federally enforceable, constitutes a violation of the Clean Air Act.
- (c) It shall not be a defense for the Permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.
- (d) An emergency does constitute an affirmative defense in an enforcement action provided the Permittee complies with the applicable requirements set forth in Section B - Emergency Provisions.

B.9 Certification [326 IAC 2-7-4(f)] [326 IAC 2-7-6(1)][326 IAC 2-7-5(3)(C)]

- (a) Where specifically designated by this permit or required by an applicable requirement, any application forms, report, or compliance certification submitted shall contain certification by a responsible official of truth, accuracy, and completeness. This certification shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.
- (b) One (1) certification shall be included, using the attached Certification Form, with each submittal requiring certification.
- (c) A responsible official is defined at 326 IAC 2-7-1(34).

B.10 Annual Compliance Certification [326 IAC 2-7-6(5)]

- (a) The Permittee shall annually submit a compliance certification report which addresses the status of the source's compliance with the applicable terms and conditions contained in this permit, including emission limitations, standards, or work practices. The initial certification shall cover the time period from the date of final permit issuance through December 31 of the same year and shall be submitted in letter form no later than July 1 of the following year to the addresses listed below. Subsequent certifications shall cover the time period from January 1 to December 31 of the previous year, and shall be submitted in letter form no later than July 1 of each year to:

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Quality
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

and

United States Environmental Protection Agency, Region V

Air and Radiation Division, Air Enforcement Branch - Indiana (AE-17J)
77 West Jackson Boulevard
Chicago, Illinois 60604-3590

- (b) The annual compliance certification report required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ, on or before the date it is due.
- (c) The annual compliance certification report shall include the following:
 - (1) The appropriate identification of each term or condition of this permit that is the basis of the certification;
 - (2) The compliance status;
 - (3) Whether compliance was continuous or intermittent;
 - (4) The methods used for determining the compliance status of the source, currently and over the reporting period consistent with 326 IAC 2-7-5(3);
 - (5) Such other facts, as specified in Section D of this permit, as IDEM, OAQ, may require to determine the compliance status of the source.

The submittal by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

B.11 Preventive Maintenance Plan [326 IAC 2-7-5(1),(3) and (13)] [326 IAC 2-7-6(1) and (6)]
[326 IAC 1-6-3]

- (a) If required by specific condition(s) in Section D of this permit, the Permittee shall prepare and maintain Preventive Maintenance Plans (PMP) within ninety (90) days after issuance of this permit, including the following information on each facility/emissions unit:
 - (1) Identification of the individual(s) responsible for inspecting, maintaining, and repairing emission control devices;
 - (2) A description of the items or conditions that will be inspected and the inspection schedule for said items or conditions;
 - (3) Identification and quantification of the replacement parts that will be maintained in inventory for quick replacement.

If due to circumstances beyond the Permittee's control, the PMP cannot be prepared and maintained within the above time frame, the Permittee may extend the date an additional ninety (90) days provided the Permittee notifies:

Indiana Department of Environmental Management
Compliance Branch, Office of Air Quality
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

The PMP and the PMP extension notification do not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (b) The Permittee shall implement the PMPs as necessary to ensure that failure to implement a PMP does not cause or contribute to a violation of any limitation on emissions or potential to emit.
- (c) A copy of the PMPs shall be submitted to IDEM, OAQ, upon request and within a reasonable time, and shall be subject to review and approval by IDEM, OAQ. IDEM, OAQ may require the Permittee to revise its PMPs whenever lack of proper maintenance causes or contributes to any violation. The PMP does not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).
- (d) Pursuant to 326 IAC 2-7-5(3)(B), records of preventive maintenance performed pursuant to the PMP shall be retained for a period of at least five (5) years. These records shall be kept at the source location for a minimum of three (3) years. The records may be stored elsewhere for the remaining two (2) years as long as they are available upon request. If the Commissioner makes a request for records to the Permittee, the Permittee shall furnish the records to the Commissioner within a reasonable time.

B.12 Emergency Provisions [326 IAC 2-7-16]

- (a) An emergency, as defined in 326 IAC 2-7-1(12), is not an affirmative defense for an action brought for noncompliance with a federal or state health-based emission limitation.
- (b) An emergency, as defined in 326 IAC 2-7-1(12), constitutes an affirmative defense to an action brought for noncompliance with a technology-based emission limitation if the affirmative defense of an emergency is demonstrated through properly signed, contemporaneous operating logs or other relevant evidence that describe the following:
 - (1) An emergency occurred and the Permittee can, to the extent possible, identify the causes of the emergency;
 - (2) The permitted facility/emissions unit was at the time being properly operated;
 - (3) During the period of an emergency, the Permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards or other requirements in this permit;
 - (4) For each emergency lasting one (1) hour or more, the Permittee notified IDEM, OAQ, within four (4) daytime business hours after the beginning of the emergency, or after the emergency was discovered or reasonably should have been discovered;

Telephone Number: 1-800-451-6027 (ask for Office of Air Quality,
Compliance Section), or
Telephone Number: 317-233-5674 (ask for Compliance Section)
Facsimile Number: 317-233-5967

- (5) For each emergency lasting one (1) hour or more, the Permittee submitted the attached Emergency Occurrence Report Form, either by mail or facsimile to:

Indiana Department of Environmental Management
Compliance Branch, Office of Air Quality
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

within two (2) working days of the time when emission limitations were exceeded

due to the emergency.

The notice fulfills the requirement of 326 IAC 2-7-5(3)(C)(ii) and must contain the following:

- (A) A description of the emergency;
- (B) Any steps taken to mitigate the emissions; and
- (C) Corrective actions taken.

The notification which shall be submitted by the Permittee does not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (6) The Permittee immediately took all reasonable steps to correct the emergency.
- (c) In any enforcement proceeding, the Permittee seeking to establish the occurrence of an emergency has the burden of proof.
- (d) This emergency provision supersedes the malfunction rule, 326 IAC 1-6 (except the requirement for a PMP in 326 IAC 1-6-3), for sources subject to 326 IAC 2-7 after the effective date of 326 IAC 2-7. This permit condition is in addition to any emergency or upset provision contained in any applicable requirement.
- (e) IDEM, OAQ, may require that the Preventive Maintenance Plans required under 326 IAC 2-7-4(c)(10) be revised in response to an emergency.
- (f) Failure to notify IDEM, OAQ, by telephone, facsimile, or other agreed upon method, of an emergency lasting more than one (1) hour in accordance with (b)(4) and (5) of this condition shall constitute a violation of 326 IAC 2-7 and any other applicable rules.
- (g) If the emergency situation causes a deviation from a technology-based limit, the Permittee may continue to operate the affected emitting facilities/emissions units during the emergency provided the Permittee immediately takes all reasonable steps to correct the emergency and minimize emissions.

B.13 Permit Shield [326 IAC 2-7-15] [326 IAC 2-7-20] [326 IAC 2-7-12]

- (a) Pursuant to 326 IAC 2-7-15, the Permittee has been granted a permit shield. The permit shield provides that compliance with the conditions of this permit shall be deemed in compliance with any applicable requirements as of the date of permit issuance, provided that either the applicable requirements are included and specifically identified in this permit or the permit contains an explicit determination or concise summary of a determination that other specifically identified requirements are not applicable. The Indiana statutes from IC 13 and rules from 326 IAC, referenced in conditions in this permit, are those applicable at the time the permit was issued. The issuance or possession of this permit shall not alone constitute a defense against an alleged violation of any law, regulation or standard, except for the requirement to obtain a Part 70 permit under 326 IAC 2-7 or for applicable requirements for which a permit shield has been granted.

This permit shield does not extend to applicable requirements which are promulgated after the date of issuance of this permit unless this permit has been modified to reflect such new requirements.

- (b) From the effective date of this permit, the Permittee's right to operate this source is

pursuant to this Title V permit. All previously issued operating permits, including those listed below, are superseded by this permit. All operating permits that are currently in effect are hereby revoked by the issuance of this Title V Permit and are no longer in effect.

- (1) OP 47-01-88-0072, issued on May 30, 1984;
 - (2) OP 47-01-88-0073, issued on May 30, 1984;
 - (3) OP 47-01-88-0074, issued on May 30, 1984;
 - (4) OP 47-01-88-0075, issued on May 30, 1984;
 - (5) OP 47-01-88-0076, issued on May 30, 1984;
 - (6) OP 47-01-88-0077, issued on May 30, 1984;
 - (7) OP 47-01-88-0078, issued on May 30, 1984;
 - (8) OP 47-01-88-0079, issued on May 30, 1984;
 - (9) OP 47-01-88-0080, issued on May 30, 1984;
 - (10) OP 47-01-92-0097, issued on July 22, 1987; and
 - (11) OP 47-04-92-0099, issued on March 30, 1988.
- (c) Construction Permit CP093-4598-00002, issued on February 27, 1998, which allowed the source to burn waste tires as a fuel in their kilns, has been revoked. Subsequent amendments and modifications to that permit including A093-9623 issued April 29, 1998, 093-11248 issued September 9, 1999, and 093-11552 issued October 23, 2000 have also been revoked. The source is no longer permitted to burn waste tires.
- (d) In addition to the nonapplicability determinations set forth in Sections D of this permit, the IDEM, OAQ has made the following nonapplicability determinations regarding this source:
- (1) None of the petroleum storage tanks listed in Section A.3 of this permit are subject to the requirements of the New Source Performance Standard (NSPS) 326 IAC 12 and 40 CFR 60.110 (Subpart K), or 40 CFR 60.110a (Subpart Ka) because all the petroleum storage tanks have capacities less than 40,000 gallons.
 - (2) None of the storage tanks listed in Section A.3 of this permit are subject to the NSPS 326 IAC 12, 40 CFR 60.110b (Subpart Kb) because the tanks have capacities less than 10,500 gallons, or do not contain a substance categorized as volatile organic liquid (VOL).
 - (3) The quarry activities, the quarry material sizing facilities/emission units, and the raw material handling and storage facilities/emission units listed in this permit are not subject to the requirements of the NSPS 326 IAC 12, 40 CFR 60.670 (Subpart OOO) because they were constructed prior to the applicability date of August 31, 1983.
 - (4) None of the other facilities/emission units listed in this permit are subject to the requirements of the NSPS 326 IAC 12, 40 CFR 60.670 (Subpart OOO) because they are not affected facilities and/or this rule specifically exempts facilities that are subject to the requirements of the NSPS, 40 CFR 60.60 (Subpart F), and facilities which follow in the plant process any facility which is subject to the requirements of the NSPS, 40 CFR 60.60 (Subpart F).
 - (5) None of the facilities/emission units listed in this permit are subject to the requirements of the NSPS 326 IAC 12, 40 CFR 60.730 (Subpart UUU) because the source does not fit the definition of a mineral processing plant.

- (6) Paragraphs #2 through #7 of exemption CP 093-9431-00002, issued August 19, 1999, list requirements pursuant to Indiana Solid Waste Regulations, 326 IAC 10 and 326 IAC 11. IDEM has not included these requirements in the Part 70 permit because IDEM, OAQ has determined that these conditions are not applicable requirements as defined by 326 IAC 2-7-1(6).
- (e) If, after issuance of this permit, it is determined that the permit is in nonconformance with an applicable requirement that applied to the source on the date of permit issuance, IDEM, OAQ, shall immediately take steps to reopen and revise this permit and issue a compliance order to the Permittee to ensure expeditious compliance with the applicable requirement until the permit is reissued. The permit shield shall continue in effect so long as the Permittee is in compliance with the compliance order.
- (f) No permit shield shall apply to any permit term or condition that is determined after issuance of this permit to have been based on erroneous information supplied in the permit application. Erroneous information means information that the Permittee knew to be false, or in the exercise of reasonable care should have been known to be false, at the time the information was submitted.
- (g) Nothing in 326 IAC 2-7-15 or in this permit shall alter or affect the following:
 - (1) The provisions of Section 303 of the Clean Air Act (emergency orders), including the authority of the U.S. EPA under Section 303 of the Clean Air Act;
 - (2) The liability of the Permittee for any violation of applicable requirements prior to or at the time of this permit's issuance;
 - (3) The applicable requirements of the acid rain program, consistent with Section 408(a) of the Clean Air Act; and
 - (4) The ability of U.S. EPA to obtain information from the Permittee under Section 114 of the Clean Air Act.
- (h) This permit shield is not applicable to any change made under 326 IAC 2-7-20(b)(2) (Sections 502(b)(10) of the Clean Air Act changes) and 326 IAC 2-7-20(c)(2) (trading based on State Implementation Plan (SIP) provisions).
- (i) This permit shield is not applicable to modifications eligible for group processing until after IDEM, OAQ, has issued the modifications. [326 IAC 2-7-12(c)(7)]
- (j) This permit shield is not applicable to minor Part 70 permit modifications until after IDEM, OAQ, has issued the modification. [326 IAC 2-7-12(b)(7)]

B.14 Prior Permits Superseded [326 IAC 2-1.1-9.5]

- (a) All terms and conditions of previous permits issued pursuant to permitting programs approved into the state implementation plan have been either
 - (1) incorporated as originally stated,
 - (2) revised, or
 - (3) deleted

by this permit.

- (b) All previous registrations and permits are superseded by this permit.

B.15 Deviations from Permit Requirements and Conditions [326 IAC 2-7-5(3)(C)(ii)]

- (a) A deviation is an exceedance of a permit limitation or a failure to comply with a requirement of the permit.

- (b) Deviations from any permit requirements, the probable cause of such deviations, and any response steps or preventive measures taken shall be reported to:

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

using the attached Quarterly Deviation and Compliance Monitoring Report, or its equivalent.

- (c) A deviation caused by an emergency shall be included in the Quarterly Deviation and Compliance Monitoring Report. (Additional requirements for emergencies are in Section B - Emergency Provisions.)
- (d) A deviation required to be reported pursuant to an applicable requirement that exists independent of this permit, shall be reported according to the schedule stated in the applicable requirement and does not need to be included in this report.

**B.16 Permit Modification, Reopening, Revocation and Reissuance, or Termination
[326 IAC 2-7-5(6)(C)] [326 IAC 2-7-8(a)] [326 IAC 2-7-9]**

- (a) This permit may be modified, reopened, revoked and reissued, or terminated for cause. The filing of a request by the Permittee for a Part 70 permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any condition of this permit. [326 IAC 2-7-5(6)(C)] The notification by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (b) This permit shall be reopened and revised under any of the circumstances listed in IC 13-15-7-2 or if IDEM, OAQ, determines any of the following:

- (1) That this permit contains a material mistake.
- (2) That inaccurate statements were made in establishing the emissions standards or other terms or conditions.
- (3) That this permit must be revised or revoked to assure compliance with an applicable requirement. [326 IAC 2-7-9(a)(3)]

- (c) Proceedings by IDEM, OAQ, to reopen and revise this permit shall follow the same procedures as apply to initial permit issuance and shall affect only those parts of this permit for which cause to reopen exists. Such reopening and revision shall be made as expeditiously as practicable. [326 IAC 2-7-9(b)]

- (d) The reopening and revision of this permit, under 326 IAC 2-7-9(a), shall not be initiated

before notice of such intent is provided to the Permittee by IDEM, OAQ, at least thirty (30) days in advance of the date this permit is to be reopened, except that IDEM, OAQ, may provide a shorter time period in the case of an emergency. [326 IAC 2-7-9(c)]

B.17 Permit Renewal [326 IAC 2-7-4] [326 IAC 2-7-3]

- (a) The application for renewal shall be submitted using the application form or forms prescribed by IDEM, OAQ, and shall include the information specified in 326 IAC 2-7-4. Such information shall be included in the application for each emission unit at this source, except those emission units included on the trivial or insignificant activities list contained in 326 IAC 2-7-1(21) and 326 IAC 2-7-1(40). The renewal application does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

Request for renewal shall be submitted to:

Indiana Department of Environmental Management
Permits Branch, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

- (b) Timely Submittal of Permit Renewal [326 IAC 2-7-4(a)(1)(D)]

- (1) A timely renewal application is one that is:

- (A) Submitted at least nine (9) months prior to the date of the expiration of this permit; and
- (B) If the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ, on or before the date it is due.

- (2) If IDEM, OAQ, upon receiving a timely and complete permit application, fails to issue or deny the permit renewal prior to the expiration date of this permit, this existing permit shall not expire and all terms and conditions shall continue in effect, including any permit shield provided in 326 IAC 2-7-15, until the renewal permit has been issued or denied.

- (c) Right to Operate After Application for Renewal [326 IAC 2-7-3]
If the Permittee submits a timely and complete application for renewal of this permit, the source's failure to have a permit is not a violation of 326 IAC 2-7 until IDEM, OAQ, takes final action denying the renewal application and all appeals of such denial have been exhausted, except that this protection shall cease to apply if, subsequent to the completeness determination, the Permittee fails to submit by the deadline specified in writing by IDEM, OAQ, any additional information identified as being needed to process the application.

- (d) United States Environmental Protection Agency Authority [326 IAC 2-7-8(e)]
If IDEM, OAQ, fails to act in a timely way on a Part 70 permit renewal, the U.S. EPA may invoke its authority under Section 505(e) of the Clean Air Act to terminate or revoke and reissue a Part 70 permit.

B.18 Permit Amendment or Modification [326 IAC 2-7-11] [326 IAC 2-7-12]

- (a) Permit amendments and modifications are governed by the requirements of 326 IAC 2-7-11 or 326 IAC 2-7-12 whenever the Permittee seeks to amend or modify this permit.

- (b) Any application requesting an amendment or modification of this permit shall be submitted to:

Indiana Department of Environmental Management
Permits Branch, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

Any such application shall be certified by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (c) The Permittee may implement administrative amendment changes addressed in the request for an administrative amendment immediately upon submittal of the request. [326 IAC 2-7-11(c)(3)]

B.19 Permit Revision Under Economic Incentives and Other Programs [326 IAC 2-7-5(8)] [326 IAC 2-7-12(b)(2)]

- (a) No Part 70 permit revision shall be required under any approved economic incentives, marketable Part 70 permits, emissions trading, and other similar programs or processes for changes that are provided for in a Part 70 permit.

- (b) Notwithstanding 326 IAC 2-7-12(b)(1) and 326 IAC 2-7-12(c)(1), minor Part 70 permit modification procedures may be used for Part 70 modifications involving the use of economic incentives, marketable Part 70 permits, emissions trading, and other similar approaches to the extent that such minor Part 70 permit modification procedures are explicitly provided for in the applicable State Implementation Plan (SIP) or in applicable requirements promulgated or approved by the U.S. EPA.

B.20 Operational Flexibility [326 IAC 2-7-20] [326 IAC 2-7-10.5]

- (a) The Permittee may make any change or changes at the source that are described in 326 IAC 2-7-20(b), (c), or (e), without a prior permit revision, if each of the following conditions is met:

- (1) The changes are not modifications under any provision of Title I of the Clean Air Act;
- (2) Any preconstruction approval required by 326 IAC 2-7-10.5 has been obtained;
- (3) The changes do not result in emissions which exceed the emissions allowable under this permit (whether expressed herein as a rate of emissions or in terms of total emissions);
- (4) The Permittee notifies the:

Indiana Department of Environmental Management
Permits Branch, Office of Air Quality
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

and

United States Environmental Protection Agency, Region V
Air and Radiation Division, Regulation Development Branch - Indiana (AR-18J)
77 West Jackson Boulevard
Chicago, Illinois 60604-3590

by written notification at least ten (10) days in advance of the proposed change. The Permittee shall attach every such notice to the Permittee's copy of this permit; and

- (5) The Permittee maintains records on-site which document, on a rolling five (5) year basis, all such changes and emissions trading that are subject to 326 IAC 2-7-20(b), (c), or (e) and makes such records available, upon reasonable request, for public review.

Such records shall consist of all information required to be submitted to IDEM, OAQ, in the notices specified in 326 IAC 2-7-20(b), (c)(1), and (e)(2).

- (b) The Permittee may make Section 502(b)(10) of the Clean Air Act changes (this term is defined at 326 IAC 2-7-1(36)) without a permit revision, subject to the constraint of 326 IAC 2-7-20(a). For each such Section 502(b)(10) of the Clean Air Act change, the required written notification shall include the following:

- (1) A brief description of the change within the source;
- (2) The date on which the change will occur;
- (3) Any change in emissions; and
- (4) Any permit term or condition that is no longer applicable as a result of the change.

The notification which shall be submitted is not considered an application form, report, or compliance certification. Therefore, the notifications required by subsections (a) and (b), which shall be submitted by the Permittee, do not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (c) Emission Trades [326 IAC 2-7-20(c)]
The Permittee may trade increases and decreases in emissions in the source, where the applicable SIP provides for such emission trades without requiring a permit revision, subject to the constraints of Section (a) of this condition and those in 326 IAC 2-7-20(c).
- (d) Alternative Operating Scenarios [326 IAC 2-7-20(d)]
The Permittee may make changes at the source within the range of alternative operating scenarios that are described in the terms and conditions of this permit in accordance with 326 IAC 2-7-5(9). No prior notification of IDEM, OAQ, or U.S. EPA is required.

B.21 Source Modification Requirement [326 IAC 2-7-10.5]

A modification, construction, or reconstruction is governed by 326 IAC 2 and 326 IAC 2-7-10.5.

B.22 Inspection and Entry [326 IAC 2-7-6] [IC 13-14-2-2]

Upon presentation of proper identification cards, credentials, and other documents as may be required by law, and subject to the Permittee's right under all applicable laws and regulations to assert that the information collected by the agency is confidential and entitled to be treated as such, the Permittee shall allow IDEM, OAQ, U.S. EPA, or an authorized representative to

perform the following:

- (a) Enter upon the Permittee's premises where a Part 70 source is located, or emissions related activity is conducted, or where records must be kept under the conditions of this permit;
- (b) Have access to and copy, any records that must be kept under the conditions of this permit;
- (c) Inspect, any facilities/emission units, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit;
- (d) As authorized by the Clean Air Act or Indiana statute or regulation, sample or monitor, substances or parameters for the purpose of assuring compliance with this permit or applicable requirements; and
- (e) Utilize any photographic, recording, testing, monitoring, or other equipment for the purpose of assuring compliance with this permit or applicable requirements.

B.23 Transfer of Ownership or Operational Control [326 IAC 2-7-11]

- (a) The Permittee must comply with the requirements of 326 IAC 2-7-11 whenever the Permittee seeks to change the ownership or operational control of the source and no other change in the permit is necessary.
- (b) Any application requesting an administrative amendment to reflect a change in the ownership or operational control of the source shall contain a written agreement containing a specific date for transfer of permit responsibility, coverage and liability between the current and new Permittee. The application shall be submitted to:

Indiana Department of Environmental Management
Permits Branch, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

The application which shall be submitted by the Permittee does not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (c) The Permittee may implement administrative amendment changes addressed in the request for an administrative amendment immediately upon submittal of the request. [326 IAC 2-7-11(c)(3)]

B.24 Annual Fee Payment [326 IAC 2-7-19] [326 IAC 2-7-5(7)]

- (a) The Permittee shall pay annual fees to IDEM, OAQ, within thirty (30) calendar days of receipt of a billing. Pursuant to 326 IAC 2-7-19(b), if the Permittee does not receive a bill from IDEM, OAQ, the applicable fee is due April 1 of each year.
- (b) Except as provided in 326 IAC 2-7-19(e), failure to pay may result in administrative enforcement action or revocation of this permit.
- (c) The Permittee may call the following telephone numbers: 1-800-451-6027 or 317-233-0425 (ask for OAQ, Technical Support and Modeling Section), to determine the appropriate permit fee.

SECTION C

SOURCE OPERATION CONDITIONS

Entire Source

Emission Limitations and Standards [326 IAC 2-7-5(1)]

C.1 Particulate Emission Limitations For Processes with Process Weight Rates Less Than One Hundred (100) pounds per hour [326 IAC 6-3-2]

- (a) Pursuant to 40 CFR 52 Subpart P, the allowable particulate emissions rate from any process not already regulated by 326 IAC 6-1 or any New Source Performance Standard and which has a maximum process weight rate less than 100 pounds per hour shall not exceed 0.551 pounds per hour.
- (b) Pursuant to 326 IAC 6-3-2(e)(2), the allowable particulate emissions rate from any process not exempt under 326 IAC 6-3-1(b) or (c) which has a maximum process weight rate less than 100 pounds per hour and the methods in 326 IAC 6-3-2(b) through (d) do not apply shall not exceed 0.551 pounds per hour. This condition is not federally enforceable.

C.2 Opacity [326 IAC 5-1]

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Alternative Opacity Limitations), opacity shall meet the following, unless otherwise stated in this permit:

- (a) Opacity shall not exceed an average of forty percent (40%) in any one (1) six (6) minute averaging period, as determined in 326 IAC 5-1-4.
- (b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

C.3 Open Burning [326 IAC 4-1] [IC 13-17-9]

The Permittee shall not open burn any material except as provided in 326 IAC 4-1-3, 326 IAC 4-1-4 or 326 IAC 4-1-6. The previous sentence notwithstanding, the Permittee may open burn in accordance with an open burning approval issued by the Commissioner under 326 IAC 4-1-4.1. 326 IAC 4-1-3(a)(2)(A) and (B) are not federally enforceable.

C.4 Incineration [326 IAC 4-2][326 IAC 9-1-2]

The Permittee shall not operate an incinerator or incinerate any waste or refuse except as provided in 326 IAC 4-2 and 326 IAC 9-1-2. 326 IAC 9-1-2 is not federally enforceable.

C.5 Fugitive Dust Emissions [326 IAC 6-4]

The Permittee shall not allow fugitive dust to escape beyond the property line or boundaries of the property, right-of-way, or easement on which the source is located, in a manner that would violate 326 IAC 6-4 (Fugitive Dust Emissions). 326 IAC 6-4-2(4) is not federally enforceable.

C.6 Operation of Equipment [326 IAC 2-7-6(6)]

Except as otherwise provided by statute, rule or this permit, all air pollution control equipment listed in this permit and used to comply with an applicable requirement shall be operated at all times that the emission units vented to the control equipment are in operation.

C.7 Stack Height [326 IAC 1-7]

The Permittee shall comply with the applicable provisions of 326 IAC 1-7 (Stack Height

Provisions), for all exhaust stacks through which a potential (before controls) of twenty-five (25) tons per year or more of particulate matter or sulfur dioxide is emitted. The provisions of 326 IAC 1-7-2, 326 IAC 1-7-3(c) and (d), 326 IAC 1-7-4(a)(3), (e), and (f), and 326 IAC 1-7-5(d) are not federally enforceable.

C.8 Asbestos Abatement Projects [326 IAC 14-10] [326 IAC 18] [40 CFR 61 Subpart M]

- (a) Notification requirements apply to each owner or operator. If the combined amount of regulated asbestos containing material (RACM) to be stripped, removed or disturbed is at least 260 linear feet on pipes or 160 square feet on other facility components, or at least thirty-five (35) cubic feet on all facility components, then the notification requirements of 326 IAC 14-10-3 are mandatory. All demolition projects require notification whether or not asbestos is present.
- (b) The Permittee shall ensure that a written notification is sent on a form provided by the Commissioner at least ten (10) working days before asbestos stripping or removal work or before demolition begins, per 326 IAC 14-10-3, and shall update such notice as necessary, including, but not limited to the following:
 - (1) When the amount of affected asbestos containing material increases or decreases by at least twenty percent (20%); or
 - (2) If there is a change in the following:
 - (A) Asbestos removal or demolition start date;
 - (B) Removal or demolition contractor; or
 - (C) Waste disposal site.
- (c) The Permittee shall ensure that the notice is postmarked or delivered according to the guidelines set forth in 326 IAC 14-10-3(2).
- (d) The notice to be submitted shall include the information enumerated in 326 IAC 14-10-3(3).

All required notifications shall be submitted to:

Indiana Department of Environmental Management
Asbestos Section, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

The notice shall include a signed certification from the owner or operator that the information provided in this notification is correct and that only Indiana licensed workers and project supervisors will be used to implement the asbestos removal project. The notifications do not require a certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (e) **Procedures for Asbestos Emission Control**
The Permittee shall comply with the applicable emission control procedures in 326 IAC 14-10-4 and 40 CFR 61.145(c). Per 326 IAC 14-10-4 emission control requirements are applicable for any removal or disturbance of RACM greater than three (3) linear feet on pipes or three (3) square feet on any other facility components or a total of at least 0.75 cubic feet on all facility components.

- (f) Indiana Accredited Asbestos Inspector
The Permittee shall comply with 326 IAC 14-10-1(a) that requires the owner or operator, prior to a renovation/demolition, to use an Indiana Accredited Asbestos Inspector to thoroughly inspect the affected portion of the facility for the presence of asbestos. The requirement that the inspector be accredited, pursuant to the provisions of 40 CFR 61, Subpart M, is federally enforceable.

Testing Requirements [326 IAC 2-7-6(1)]

C.9 Performance Testing [326 IAC 3-6]

- (a) All testing shall be performed according to the provisions of 326 IAC 3-6 (Source Sampling Procedures), except as provided elsewhere in this permit, utilizing any applicable procedures and analysis methods specified in 40 CFR 51, 40 CFR 60, 40 CFR 61, 40 CFR 63, 40 CFR 75, or other procedures approved by IDEM, OAQ.

A test protocol, except as provided elsewhere in this permit, shall be submitted to:

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Quality
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

no later than thirty-five (35) days prior to the intended test date. The protocol submitted by the Permittee does not require certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (b) The Permittee shall notify IDEM, OAQ of the actual test date at least fourteen (14) days prior to the actual test date. The notification submitted by the Permittee does not require certification by the "responsible official" as defined by 326 IAC 2-7-1(34).
- (c) All test reports must be received by IDEM, OAQ not later than forty-five (45) days after the completion of the testing. An extension may be granted by IDEM, OAQ, if the source submits to IDEM, OAQ, a reasonable written explanation not later than five (5) days prior to the end of the initial forty-five (45) day period. The reports submitted by the Permittee do require certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

Compliance Requirements [326 IAC 2-1.1-11]

C.10 Compliance Requirements [326 IAC 2-1.1-11]

The commissioner may require stack testing, monitoring, or reporting at any time to assure compliance with all applicable requirements by issuing an order under 326 IAC 2-1.1-11. Any monitoring or testing shall be performed in accordance with 326 IAC 3 or other methods approved by the commissioner or the U.S. EPA.

Compliance Monitoring Requirements [326 IAC 2-7-5(1)] [326 IAC 2-7-6(1)]

C.11 Compliance Monitoring [326 IAC 2-7-5(3)] [326 IAC 2-7-6(1)]

Unless otherwise specified in this permit, all monitoring requirements not already legally required shall be implemented within ninety (90) days of permit issuance. If required by Section D, the Permittee shall be responsible for installing any necessary equipment and initiating any required monitoring related to that equipment. If due to circumstances beyond its control, that equipment cannot be installed and operated within ninety (90) days, the Permittee may extend the compliance schedule related to the equipment for an additional ninety (90) days provided the Permittee notifies:

Indiana Department of Environmental Management
Compliance Branch, Office of Air Quality
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

in writing, prior to the end of the initial ninety (90) day compliance schedule, with full justification of the reasons for the inability to meet this date.

The notification which shall be submitted by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

Unless otherwise specified in the approval for the new facilities/emission units, compliance monitoring for new facilities/emission units or facilities/emission units added through a source modification shall be implemented when operation begins.

C.12 Maintenance of Opacity Monitoring Equipment [326 IAC 2-7-5(3)(A)(iii)]

- (a) The Permittee shall install, calibrate, maintain, and operate all necessary continuous opacity monitors (COMS) and related equipment. In addition, prompt corrective action shall be initiated whenever indicated.
- (b) In the event that a breakdown of the continuous opacity monitoring equipment occurs, a record shall be made of the times and reasons of the breakdown and efforts made to correct the problem.
- (c) Whenever a continuous opacity monitor is malfunctioning or will be down for calibration, maintenance, or repairs for a period of four (4) hours or more, a calibrated backup COM shall be brought online within four (4) hours of shutdown of the primary COM, if possible. If this is not possible, visible emission readings shall be performed in accordance with 40 CFR 60, Appendix A, Method 9, for a minimum of one (1) hour, beginning four (4) hours after the start of the malfunction or down time.
 - (1) If the reading period begins less than one hour before sunset, readings shall be performed until sunset. If the first required reading period would occur between sunset and sunrise, the first reading shall be performed as soon as there is sufficient daylight.
 - (2) Method 9 opacity readings shall be repeated for a minimum of one (1) hour at least once every four (4) hours during daylight operations, until such time that the continuous opacity monitor is back in operation.
 - (3) All of the opacity readings during this period shall be reported in the Quarterly Deviation and Compliance Monitoring Reports.
- (d) Nothing in this permit, shall excuse the Permittee from complying with the requirements to operate a continuous opacity monitor system pursuant to 326 IAC 3-5 and 40 CFR 63, Subpart LLL.

C.13 Monitoring Methods [326 IAC 3] [40 CFR 60] [40 CFR 63]

Any monitoring or testing required by Section D of this permit shall be performed according to the provisions of 326 IAC 3, 40 CFR 60 Appendix A, 40 CFR 60 Appendix B, 40 CFR 63, or other approved methods as specified in this permit.

C.14 Pressure Gauge and Other Instrument Specifications [326 IAC 2-1.1-11] [326 IAC 2-7-5(3)] [326 IAC 2-7-6(1)]

- (a) Whenever a condition in this permit requires the measurement of pressure drop, voltage, current, or temperature across any part of the unit or its control device, the gauge or instrument employed shall have a scale such that the expected normal reading shall be no less than twenty percent (20%) of full scale and be accurate within plus or minus two percent ($\pm 2\%$) of full scale reading.
- (b) The Permittee may request the IDEM, OAQ approve the use of a pressure gauge or other instrument that does not meet the above specifications provided the Permittee can demonstrate an alternative pressure gauge or other instrument specification will adequately ensure compliance with permit conditions requiring the measurement of pressure drop or other parameters.

Corrective Actions and Response Steps [326 IAC 2-7-5] [326 IAC 2-7-6]

C.15 Emergency Reduction Plans [326 IAC 1-5-2] [326 IAC 1-5-3]

Pursuant to 326 IAC 1-5-2 (Emergency Reduction Plans; Submission):

- (a) The Permittee prepared and submitted written emergency reduction plans (ERPs) consistent with safe operating procedures on March 14, 2000.
- (b) If the ERP is disapproved by IDEM, OAQ, the Permittee shall have an additional thirty (30) days to resolve the differences and submit an approvable ERP.
- (c) Upon direct notification by IDEM, OAQ, that a specific air pollution episode level is in effect, the Permittee shall immediately put into effect the actions stipulated in the approved ERP for the appropriate episode level.
[326 IAC 1-5-3]

C.16 Risk Management Plan [326 IAC 2-7-5(12)] [40 CFR 68 Subpart G]

If a regulated substance, subject to 40 CFR 68, is present at a source in more than a threshold quantity, 40 CFR 68 is an applicable requirement and the Permittee shall submit:

- (a) A compliance schedule for meeting the requirements of 40 CFR 68 by the date provided in 40 CFR 68.10(a); or
- (b) As a part of the annual compliance certification submitted under 326 IAC 2-7-6(5), a certification statement that the source is in compliance with all the requirements of 40 CFR 68, including the registration and submission of a Risk Management Plan (RMP).

All documents submitted pursuant to this condition shall include the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

C.17 Compliance Response Plan - Preparation, Implementation, Records, and Reports [326 IAC 2-7-5][326 IAC 2-7-6]

- (a) The Permittee is required to prepare a Compliance Response Plan (CRP) for each compliance monitoring condition of this permit. A CRP shall be submitted to IDEM, upon request. The CRP shall be prepared within ninety (90) days after issuance of this permit by the Permittee, supplemented from time to time by the Permittee, maintained on site, and comprised of:
 - (1) Reasonable response steps that may be implemented in the event that a response step is needed pursuant to the requirements of Section D of this

permit; and an expected time frame for taking reasonable response steps.

- (2) If, at any time, the Permittee takes reasonable response steps that are not set forth in the Permittee's current Compliance Response Plan and the Permittee documents such response in accordance with subsection (e) below, the Permittee shall amend its Compliance Response Plan to include such response steps taken.
- (b) For each compliance monitoring condition of this permit, reasonable response steps shall be taken when indicated by the provisions of that compliance monitoring condition as follows:
 - (1) Reasonable response steps shall be taken as set forth in the Permittee's current Compliance Response Plan; or
 - (2) If none of the reasonable response steps listed in the Compliance Response Plan is applicable or responsive to the excursion, the Permittee shall devise and implement additional response steps as expeditiously as practical. Taking such additional response steps shall not be considered a deviation from this permit so long as the Permittee documents such response steps in accordance with this condition.
 - (3) If the Permittee determines that additional response steps would necessitate that the emissions unit or control device be shut down, the IDEM, OAQ shall be promptly notified of the expected date of the shut down, the status of the applicable compliance monitoring parameter with respect to normal, and the results of the actions taken up to the time of notification.
 - (4) Failure to take reasonable response steps shall constitute a violation of the permit.
- (c) The Permittee is not required to take any further response steps for any of the following reasons:
 - (1) A false reading occurs due to the malfunction of the monitoring equipment and prompt action was taken to correct the monitoring equipment.
 - (2) The Permittee has determined that the compliance monitoring parameters established in the permit conditions are technically inappropriate, has previously submitted a request for a minor permit modification to the permit, and such request has not been denied; or
 - (3) An automatic measurement was taken when the process was not operating; or
 - (4) The process has already returned or is returning to operating within "normal" parameters and no response steps are required.
- (d) When implementing reasonable steps in response to a compliance monitoring condition, if the Permittee determines that an exceedance of an emission limitation has occurred, the Permittee shall report such deviations pursuant to Section B-Deviations from Permit Requirements and Conditions.
- (e) The Permittee shall record all instances when response steps are taken. In the event of an emergency, the provisions of 326 IAC 2-7-16 (Emergency Provisions) requiring prompt corrective action to mitigate emissions shall prevail.

- (f) Except as otherwise provided by a rule or provided specifically in Section D, all monitoring as required in Section D shall be performed when the emission unit is operating, except for time necessary to perform quality assurance and maintenance activities.

**C.18 Actions Related to Noncompliance Demonstrated by a Stack Test [326 IAC 2-7-5]
[326 IAC 2-7-6]**

- (a) When the results of a stack test performed in conformance with Section C - Performance Testing, of this permit exceed the level specified in any condition of this permit, the Permittee shall take appropriate response actions. Upon request, the Permittee shall submit a description of these response actions to IDEM, OAQ, within thirty (30) days of receipt of the test results. The Permittee shall take appropriate action to minimize excess emissions from the affected facility/emissions unit while the response actions are being implemented.
- (b) A retest to demonstrate compliance shall be performed within one hundred twenty (120) days of receipt of the original test results. Should the Permittee demonstrate to IDEM, OAQ that retesting in one-hundred and twenty (120) days is not practicable, IDEM, OAQ may extend the retesting deadline.
- (c) IDEM, OAQ reserves the authority to take any actions allowed under law in response to noncompliant stack tests.

The documents submitted pursuant to this condition do require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

C.19 Emission Statement [326 IAC 2-7-5(3)(C)(iii)][326 IAC 2-7-5(7)][326 IAC 2-7-19(c)][326 IAC 2-6]

- (a) The Permittee shall submit an annual emission statement certified pursuant to the requirements of 326 IAC 2-6, that must be received by July 1 of each year and must comply with the minimum requirements specified in 326 IAC 2-6-4. The annual emission statement shall meet the following requirements:
 - (1) Indicate estimated actual emissions of criteria pollutants from the source, in compliance with 326 IAC 2-6 (Emission Reporting);
 - (2) Indicate estimated actual emissions of other regulated pollutants (as defined by 326 IAC 2-7-1) from the source, for purposes of Part 70 fee assessment.
- (b) The annual emission statement covers the twelve (12) consecutive month time period starting January 1 and ending December 31. The annual emission statement must be submitted to:

Indiana Department of Environmental Management
Technical Support and Modeling Section, Office of Air Quality
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

The emission statement does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).
- (c) The annual emission statement required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the

private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ, on or before the date it is due.

C.20 General Record Keeping Requirements [326 IAC 2-7-5(3)][326 IAC 2-7-6]

- (a) Records of all required data, reports, and support information shall be retained for a period of at least five (5) years from the date of monitoring sample, measurement, report, or application. These records shall be kept at the source location for a minimum of three (3) years. The records may be stored elsewhere for the remaining two (2) years as long as they are available upon request. If the Commissioner makes a request for records to the Permittee, the Permittee shall furnish the records to the Commissioner within a reasonable time.
- (b) Unless otherwise specified in this permit, all record keeping requirements not already legally required shall be implemented within ninety (90) days of permit issuance.

C.21 General Reporting Requirements [326 IAC 2-7-5(3)(C)]

- (a) The source shall submit the attached Quarterly Deviation and Compliance Monitoring Report or its equivalent. Any deviation from permit requirements, the date(s) of each deviation, the cause of the deviation, and the response steps taken must be reported. This report shall be submitted within thirty (30) days of the end of the reporting period. The Quarterly Deviation and Compliance Monitoring Report shall include the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).
- (b) The report required in (a) of this condition and reports required by conditions in Section D of this permit shall be submitted to:

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Quality
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015
- (c) Unless otherwise specified in this permit, any notice, report, or other submission required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ, on or before the date it is due.
- (d) Unless otherwise specified in this permit, all reports required in Section D of this permit shall be submitted within thirty (30) days of the end of the reporting period. All reports do require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).
- (e) The first report shall cover the period commencing on the date of issuance of this permit and ending on the last day of the reporting period. Reporting periods are based on calendar years.

C.22 NESHAP Notification and Reporting Requirements [40 CFR Part 63, Subparts A and LLL]

The Permittee shall comply with all reporting provisions specified in 40 CFR Part 63, Subpart LLL, and in particular:

- (a) The Permittee has submitted an initial notification in accordance with 40 CFR 63.9(b) (Subpart A, General Provisions) on October 11, 1999 to U.S. EPA and IDEM. The Permittee provided the following information:

- (1) The name and address of the Permittee;
 - (2) The address (i.e., physical location) of the affected source;
 - (3) An identification of the relevant standard, or other requirement, that is the basis of the notification and the source's compliance date;
 - (4) A brief description of the nature, size, design, and method of operation of the source, including its operating design capacity and an identification of each point of emission for each hazardous air pollutant, or if a definitive identification is not yet possible, a preliminary identification of each point of emission for each hazardous air pollutant; and
 - (5) A statement of whether the affected source is a major source or an area source.
- (b) The Permittee shall submit a notification of performance tests, as required by 40 CFR 63.7 and 40 CFR 63.9(e).
 - (c) The Permittee shall submit a notification of opacity and visible emission observations as required by 40 CFR 63.1349 in accordance with 40 CFR 63.6(h)(5) and 40 CFR 63.9(f).
 - (d) The Permittee shall submit notification, as required by 40 CFR 63.9(g), of the date that continuous emission monitor performance evaluation required by 40 CFR 63.8(e) is scheduled to begin.
 - (e) The Permittee shall submit notification of compliance status, as required by 40 CFR 63.9(h).
 - (f) The notification(s) as required in this section shall be submitted to:

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

and

United States Environmental Protection Agency, Region V
Air and Radiation Division, Air Enforcement Branch - Indiana (AE-17J)
77 West Jackson Boulevard
Chicago, Illinois 60604-3590

Stratospheric Ozone Protection

C.23 Compliance with 40 CFR 82 and 326 IAC 22-1

Pursuant to 40 CFR 82 (Protection of Stratospheric Ozone), Subpart F, except as provided for motor vehicle air conditioners in Subpart B, the Permittee shall comply with the standards for recycling and emissions reduction:

- (a) Persons opening appliances for maintenance, service, repair, or disposal must comply with the required practices pursuant to 40 CFR 82.156.
- (b) Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to 40 CFR 82.158.

- (c) Persons performing maintenance, service, repair, or disposal of appliances must be certified by an approved technician certification program pursuant to 40 CFR 82.161.

SECTION D.1

FACILITY/EMISSION UNIT OPERATION CONDITIONS

Facility/Emissions Unit Description [326 IAC 2-7-5(15)]

The quarry activities, as follows:

- (1) Drilling/blasting, hauling, handling and storage, identified as F01, commenced prior to 1971, with associated fugitive particulate matter (PM) emissions.

The quarry material sizing facilities/emissions units, as follows:

- (1) One (1) primary crusher, identified as EU01, constructed in 1965, with a nominal rate of 975 tons per hour, with PM emissions controlled by one (1) baghouse, identified as QDC2, and exhausting to one (1) stack, identified as S-QDC2.
- (2) One (1) surge bin and transfer system, identified as EU02, constructed in 1965, with a nominal rate of 975 tons per hour, with PM emissions controlled by one (1) baghouse, identified as QDC3, and exhausting to one (1) stack, identified as S-QDC3.
- (3) One (1) secondary crusher, identified as EU03, constructed in 1965, with a nominal rate of 975 tons per hour, with PM emissions controlled by one (1) baghouse, identified as QDC4, and exhausting to one (1) stack, identified as S-QDC4.
- (4) One (1) tertiary crusher, identified as EU04, constructed in 1965, with a nominal rate of 975 tons per hour, with PM emissions controlled by one (1) baghouse, identified as QDC4, and exhausting to one (1) stack, identified as S-QDC4.
- (5) One (1) north screen house, identified as EU05, constructed in 1965, with a nominal rate of 975 tons per hour, with PM emissions controlled by one (1) baghouse, identified as QDC5, and exhausting to one (1) stack, identified as S-QDC5.
- (6) One (1) south screen house, identified as EU06, constructed in 1965, with a nominal rate of 975 tons per hour, with PM emissions controlled by one (1) baghouse, identified as QDC6, and exhausting to one (1) stack, identified as S-QDC6.
- (7) One (1) belt #7 to belt #8 conveyor transfer point, identified as EU07, constructed in 1965, with a nominal rate of 975 tons per hour, with PM emissions controlled by one (1) baghouse, identified as QDC7, and exhausting to one (1) stack, identified as S-QDC7.
- (8) One (1) belt #8 to belt #9 conveyor transfer point, identified as EU08, constructed in 1965, with a nominal rate of 975 tons per hour, with PM emissions controlled by one (1) baghouse, identified as QDC8, and exhausting to one (1) stack, identified as S-QDC8.
- (9) One (1) belt #9 to belt #10 conveyor transfer point, identified as F02, constructed in 1965, with a nominal rate of 975 tons per hour, using seasonal water suppression to control PM emissions, and exhausting directly to the atmosphere.

(The information describing the processes contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Facility/Emissions Unit Description [326 IAC 2-7-5(15)]

The cement kiln dust storage, disposal, mining, and handling facilities/emissions units, as follows:

- (1) One (1) cement kiln dust (CKD) bin, identified as EU24, constructed in 1959, with a nominal rate of 100 tons per hour, with PM emissions controlled by one (1) baghouse, identified as KDC7, and exhausting to one (1) stack, identified as S-KDC7.
- (2) One (1) CKD truck unloading system, identified as EU24A, constructed in 1959, with a nominal rate of 60 tons per hour, with PM emissions controlled by one (1) baghouse, identified as KDC7A, and exhausting to one (1) stack, identified as S-KDC7A.
- (3) One (1) CKD mixer, identified as EU24B, constructed in 1999, with a nominal rate of 104 tons per hour, with PM emissions controlled by one (1) baghouse, identified as KDC7B, and exhausting to one (1) stack, identified as S-KDC7B.
- (4) One (1) CKD truck loadout, identified as F07, constructed in 1999, with a nominal rate of 104 tons per hour, with PM emissions uncontrolled, and exhausting directly to the atmosphere.
- (5) CKD disposal, and mining facilities/emission units, identified as F05, constructed in 1999, with particulate matter emissions uncontrolled, and exhausting directly to the atmosphere.

(The information describing the processes contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.1.1 Particulate [326 IAC 6-3-2]

- (a) Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), the allowable particulate emission rate from the quarry material sizing facilities/emissions units (EU01 through EU08 and F02) shall not exceed 77.3 pounds per hour (total for all facilities/emission units combined) when operating at a process weight rate of 975 tons per hour.

The pounds per hour limitation was calculated with the following equation:

Interpolation and extrapolation of the data for the process weight rate in excess of 60,000 pounds per hour shall be accomplished by use of the equation:

$$E = 55.0 P^{0.11} - 40 \quad \text{where } E = \text{rate of emission in pounds per hour; and} \\ P = \text{process weight rate in tons per hour}$$

When the process weight rate exceeds 200 tons per hour, the maximum allowable emissions may exceed the pounds per hour limitation calculated using the above referenced equation, provided the concentration of particulate matter in the discharge gases to the atmosphere is less than 0.10 pounds per one thousand (1,000) pounds of gases.

- (b) Pursuant to minor source modification 093-11313 issued November 9, 1999 and 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), the allowable PM emission rate from the cement kiln dust (CKD) storage, disposal, mining, and handling facilities/emissions units (EU24, EU24A, and EU24B) shall not exceed 51.3 pounds per hour (total for all facilities/emission units combined) when operating at a process weight rate of 100 tons per hour.

The pounds per hour limitation was calculated with the following equation:

Interpolation of the data for the process weight rate up to 60,000 pounds per hour shall

be accomplished by use of the equation:

$$E = 4.1 P^{0.67}$$

where E = rate of emission in pounds per hour; and
P = process weight rate in tons per hour

D.1.2 Determinations of Nonapplicability [40 CFR 60, Subparts A and F] [40 CFR 63, Subparts A and LLL]

- (a) None of the facilities/emission units listed in this section are subject to the requirements of the New Source Performance Standards (NSPS), 40 CFR 60, Subparts A and F (Standards of Performance for Portland Cement Plants) because they are not affected facilities that were constructed or modified prior to the applicability date of August 17, 1971.
- (b) None of the quarry facilities/emission units or quarry material sizing facilities/emission units, or the cement kiln dust storage, disposal, mining, and handling facilities/emission units listed in this section are subject to the requirements of the National Emissions Standards for Hazardous Air Pollutants (NESHAP) 40 CFR 63 Subparts A and LLL, because they are not affected facilities under this rule.

D.1.3 Prevention of Significant Deterioration (PSD) [326 IAC 2-2]

Pursuant to minor source modification 093-11313 issued November 9, 1999, and in order to render the requirements of PSD not applicable, the following conditions shall apply:

- (a) The combined PM emissions from the CKD mixer (EU24B), the CKD disposal and mining facilities (F05), and the truck loadout (F07) shall not exceed 5.68 pounds per hour.
- (b) The combined PM10 emissions from the CKD mixer (EU24B), the CKD disposal and mining facilities (F05), and the truck loadout (F07) shall not exceed 3.40 pounds per hour.

Therefore, the requirements of 326 IAC 2-2 (PSD) and 40 CFR 52.21 are not applicable.

D.1.4 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for the control devices listed in this section.

Compliance Determination Requirements

D.1.5 Particulate Control

Pursuant to minor source modification 093-11313 issued November 9, 1999, except as otherwise provided by statute, rule or this permit, each baghouse listed in this section for particulate control shall be in operation at all times when its associated facility/emissions unit is in operation, in order to comply with Conditions D.1.1 and D.1.3.

Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

D.1.6 Visible Emissions Notations

Visible emission notations of all the baghouse stack exhausts shall be performed once per shift during normal daylight operations. A trained employee shall record whether emissions are normal or abnormal.

- (a) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not

counting startup or shut down time.

- (b) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.
- (c) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.
- (d) The Compliance Response Plan for these units shall contain troubleshooting contingency and response steps for when an abnormal emission is observed or when visible emissions are observed crossing the property line. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a violation of this permit.

D.1.7 Parametric Monitoring

The Permittee shall record the total static pressure drop across each baghouse listed in this section, at least once per shift when the associated facility/emissions unit is in operation. When for any one reading, the pressure drop across a baghouse is outside the normal range of 1.0 and 8.0 inches of water or a range established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a violation of this permit.

The instrument used for determining the pressure shall comply with Section C - Pressure Gauge and Other Instrument Specifications, of this permit, shall be subject to approval by IDEM, OAQ, and shall be calibrated at least once every six (6) months.

D.1.8 Baghouse Inspections

An inspection shall be performed during the last month of each calendar quarter of all bags controlling the facilities/emissions units listed in this section. All defective bags shall be replaced.

D.1.9 Broken or Failed Bag Detection

In the event that bag failure has been observed.

- (a) For multi-compartment units, the affected compartments will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if there are no visible emissions from the emission unit, control device, or stack, or if the event qualifies as an emergency and the Permittee satisfies the emergency provisions of this permit (Section B- Emergency Provisions). Within eight (8) business hours of the determination of failure, response steps according to the timetable described in the Compliance Response Plan shall be initiated. For any failure with corresponding response steps and timetable not described in the Compliance Response Plan, response steps shall be devised within eight (8) business hours of discovery of the failure and shall include a timetable for completion. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a violation of this permit.
- (b) For single compartment baghouses, if failure is indicated by a significant drop in the baghouse's pressure readings with abnormal visible emissions or the failure is indicated by an opacity violation, or if bag failure is determined by other means, such as gas temperatures, flow rates, air infiltration, leaks, dust traces, or triboflows, then failed units

and the associated process will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.1.10 Record Keeping Requirements

- (a) To document compliance with Condition D.1.6, the Permittee shall maintain records of visible emission notations of the baghouse stack exhausts once per shift.
- (b) To document compliance with Condition D.1.7, the Permittee shall maintain records of the inlet and outlet differential static pressure of each baghouse once per shift.
- (c) To document compliance with Condition D.1.8, the Permittee shall maintain records of the results of the inspections required under Condition D.1.8.
- (d) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

SECTION D.2 FACILITY/EMISSION UNIT OPERATION CONDITIONS

Facility/Emissions Unit Description [326 IAC 2-7-5(15)]

The raw material handling and storage facilities/emissions units, as follows:

- (1) A conveying system to transport raw material to storage, identified as EU09, constructed in 1960, with a nominal rate of 200 tons per hour, with PM emissions controlled by one (1) baghouse, identified as RMDC1 and exhausting to one (1) stack, identified as S-RMDC1.
- (2) One (1) shale crusher, identified as EU10, constructed in 1961, with a nominal rate of 200 tons per hour, with PM emissions controlled by one (1) baghouse, identified as RMDC2, and exhausting to one (1) stack, identified as S-RMDC2.
- (3) One (1) material storage building, identified as F03, constructed in 1959-1960, with fugitive emissions from various conveyors and storage piles controlled by partial enclosure and exhausting directly to the atmosphere.
- (4) One (1) coal unloading building, identified as F08, constructed in 1960, with particulate matter emissions controlled by partial enclosure and exhausting directly to the atmosphere.
- (5) One (1) coal pile, identified as F04, constructed prior to 1971, with particulate matter emissions uncontrolled, and exhausting directly to the atmosphere.
- (6) Raw material stockpiles collectively, identified as F09, storage commencing prior to 1971, used for temporary storage of various feed materials, including gypsum, foundry sand, mill scale, and slag, with particulate matter emissions uncontrolled, and exhausting to the atmosphere.

The raw mill facilities/emissions units, as follows:

- (1) One (1) coal-fired stoker for backup heat supply for the raw mills, identified as EU11B and EU12B, constructed in 1977, with natural gas-fired burners installed in 1999, identified as EU11A and EU12A with a heat input rate of 37 million British thermal units (MMBtu) per hour, and exhausting to the raw mills. A bypass stack will be used during startup, shutdown, and malfunction periods.
- (2) One (1) raw mill #1, identified as EU11, constructed in 1961, with a nominal rate of 100 tons per hour and including a natural gas-fired burner, identified as EU11A, with a maximum heat input capacity of 20 million British thermal units (MMBtu) per hour, with PM emissions controlled by one (1) baghouse, identified as RMDC3, and exhausting to one (1) stack, identified as S-RMDC3.
- (3) One (1) raw mill #2, identified as EU12, constructed in 1961, with a nominal rate of 100 tons per hour and including a natural gas-fired burner, identified as EU12A, with a maximum heat input capacity of 20 million British thermal units (MMBtu) per hour, with PM emissions controlled by one (1) baghouse, identified as RMDC4, and exhausting to one (1) stack, identified as S-RMDC4.

Insignificant Activities, as follows:

- (1) Three (3) coal mills, with nominal rates of 5, 6, and 6 tons per hour, with particulate matter emissions controlled by total enclosure, and exhausting to the kilns.
- (2) One coal feeder conveyor and one coal unloading conveyor, with nominal rates of 250 tons per hour and 260 tons per hour, respectively, constructed prior to August 17, 1971, with particulate matter emissions controlled by total enclosure.

(The information describing the processes contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.2.1 Particulate [326 IAC 6-3-2]

-
- (a) Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), the allowable particulate emission rate from the raw material conveying system (EU09) shall not exceed 58.5 pounds per hour when operating at a process weight rate of 200 tons per hour.
 - (b) Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), the allowable particulate emission rate from the shale crusher (EU10) shall not exceed 58.5 pounds per hour when operating at a process weight rate of 200 tons per hour.
 - (c) Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), the allowable particulate emission rate from the raw mill #1 (EU11, EU11A and EU11B) shall not exceed 51.3 pounds per hour when operating at a process weight rate of 100 tons per hour.
 - (d) Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), the allowable particulate emission rate from the raw mill #2 (EU12, EU12A and EU12B) shall not exceed 51.3 pounds per hour when operating at a process weight rate of 100 tons per hour.

The pounds per hour limitations were calculated with the following equation:

Interpolation and extrapolation of the data for the process weight rate in excess of 60,000 pounds per hour shall be accomplished by use of the equation:

$$E = 55.0 P^{0.11} - 40 \quad \text{where } E = \text{rate of emission in pounds per hour; and} \\ P = \text{process weight rate in tons per hour}$$

D.2.2 General Provisions Relating to NESHAP [326 IAC 20-1][40 CFR Part 63, Subpart A]

On and after June 14, 2002, the provisions of 40 CFR Part 63, Subpart A - General Provisions, which are incorporated by reference in 326 IAC 20-1, apply to the material storage building (F03), and the raw mills (EU11, EU11A, EU11B, EU12, EU12A and EU12B) described in this section except when otherwise specified in 40 CFR Part 63, Subpart LLL.

D.2.3 NESHAP Emissions Limitation [40 CFR 63, Subpart LLL]

Pursuant to 40 CFR 63.1348 (Emissions Standards and Operating Limits), on and after June 14, 2002, which is the compliance date for the National Emission Standards for Hazardous Air Pollutants (NESHAP) for the Portland Cement Manufacturing Industry, the visible emissions from the material storage building (F03) and each of the raw mills (EU11, EU11A, EU11B, EU12, EU12A and EU12B) shall each not exceed ten percent (10%) opacity. On and after June 14, 2002, 326 IAC 5-1-2 shall not apply to the facilities/emission units subject to the opacity limit in this condition.

D.2.4 Sulfur Dioxide (SO₂) [326 IAC 7-1.1] [326 IAC 7-2-1]

The raw mills (EU11 and EU12) can be fired by either the coal-fired stoker (EU11B and EU12B) or the natural gas burners (EU11A and EU12A). The limit in (a) applies only when the using the coal-fired stoker (EU11B and EU12B).

- (a) Pursuant to 326 IAC 7-1.1 (Sulfur Dioxide Emission Limitations), the SO₂ emissions from the combustion of coal in the coal-fired stoker shall not exceed six (6.0) pounds per million Btu heat input. Pursuant to 326 IAC 7-2-1, compliance shall be demonstrated on a

calendar month average. 326 IAC 7-1.1 and 326 IAC 7-2-1 are not federally enforceable.

- (b) Pursuant to minor source modification 093-10597 issued March 1, 1999, the two (2) natural gas-fired burners (EU11A and EU12A) shall combust only natural gas. Therefore, the requirements of 326 IAC 7-1.1 (Sulfur Dioxide Emission Limitations) will not apply to the natural gas-fired burners (EU11A and EU12A).

D.2.5 NSPS for Portland Cement Plants [326 IAC 12] [40 CFR 60, Subpart F]

Pursuant to minor source modification 093-10597 issued March 1, 1999, the natural gas-fired burners (EU11A and EU12A) shall not operate at the same time as the existing 37 million Btu per hour coal-fired stoker (EU11B and EU12B). Therefore, there is no emissions increase for the system and the requirements of 326 IAC 12 (New Source Performance Standards) and 40 CFR Part 60, Subparts A and F, will not apply to the raw mills (EU11 and EU12), the coal stoker (EU11B and EU12B), or the natural gas-fired burners (EU11A and EU12A).

D.2.6 Determinations of Nonapplicability [40 CFR 60, Subparts A and F] [40 CFR 63, Subparts A and LLL] [40 CFR 60, Subpart Y]

- (a) The raw material handling and storage facilities/emission units (EU09, EU10, F03, F04, F08, and F09) are not subject to the requirements of the New Source Performance Standards (NSPS), 40 CFR 60, Subparts A and F (Standards of Performance for Portland Cement Plants) because they were constructed prior to the applicability date of August 17, 1971 and have not been modified since the applicability date, or they are not considered affected facilities under the rule.
- (b) The conveying system (EU09), the shale crusher (EU10), the coal pile (F04), the coal unloading building (F08), the raw material stockpiles (F09), and the insignificant coal mills are not subject to the requirements of the National Emissions Standards for Hazardous Air Pollutants (NESHAP) 40 CFR 63 Subparts A and LLL, because these facilities/emission units are not affected facilities under the regulation.
- (c) The coal mills and the coal conveyors are not subject to the requirements of the New Source Performance Standard, 326 IAC 12 and 40 CFR 60, Subpart Y because they are completely enclosed and there is no discharge to the atmosphere from the coal mills.
- (d) The coal pile (F04) is not subject to the requirements of the New Source Performance Standard, 326 IAC 12 and 40 CFR 60, Subpart Y because it is not considered an affected facility under the regulation. Additionally, facilities/emission units EU09, EU10, F03, F08, F09, EU11A, EU11B, EU12A, EU12B, EU11, EU12, the three insignificant coal mills, the coal feeder conveyor and the coal unloading conveyor are not subject to the requirements of the New Source Performance Standard, 326 IAC 12 and 40 CFR 60, Subpart Y because they are not affected facilities under the rule or they were not constructed or modified after October 24, 1974.

D.2.7 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for the control devices listed in this section. If the Operations and Maintenance Plan required by Condition D.2.11 is developed in accordance with Section B - Preventive Maintenance Plan, then once the Operations and Maintenance Plan has been developed, it shall satisfy this condition.

Compliance Determination Requirements

D.2.8 Testing Requirements [326 IAC 2-7-6(1),(6)] [326 IAC 2-1.1-11] [40 CFR 63, Subpart LLL]

- (a) Within 180 days after June 14, 2002, which is the compliance date for the Portland Cement Manufacturing Industry NESHAP, the Permittee shall demonstrate initial compliance with the limit established in Condition D.2.3 by conducting a test in accordance with 40 CFR 63.1349 and Method 9 of 40 CFR Part 60, Appendix A. Testing shall be conducted in accordance with Section C - Performance Testing.
- (b) Within 180 days after issuance of this Part 70 permit, in order to demonstrate compliance with Condition D.2.1, the Permittee shall perform PM testing on the Raw Mills (EU11, EU11A, EU11B, EU12, EU12A, and EU12B) utilizing methods as approved by the Commissioner. These tests shall be repeated at least once every five (5) years from the date of this valid compliance demonstration. Testing shall be conducted in accordance with Section C- Performance Testing. All associated facilities exhausting to a single stack must all be operating when determining compliance with the limit.

D.2.9 Sulfur Dioxide Emissions and Sulfur Content [326 IAC 2-7-5(A)] [326 IAC 2-7-6] [326 IAC 7-2]

Pursuant to 326 IAC 7-1.1-2, the Permittee shall demonstrate that the sulfur dioxide emissions from coal combustion do not exceed six (6.0) pounds per MMBtu. Pursuant to 326 IAC 7-2, compliance shall be determined utilizing the following methods:

- (a) Coal sampling and analysis shall be performed using one of the following procedures:
 - (1) Minimum Coal Sampling Requirements and Analysis Methods [326 IAC 3-7-2(b)(3)]:
 - (A) The coal sample acquisition point shall be at a location where representative samples of the total coal flow to be combusted by the facility or facilities may be obtained. A single as-bunkered or as-burned sampling station may be used to represent the coal to be combusted by multiple facilities using the same stockpile feed system;
 - (B) Coal shall be sampled at least three (3) times per day and at least one (1) time per eight (8) hour period unless no coal is bunkered during the preceding eight (8) hour period;
 - (C) Minimum sample size shall be five hundred (500) grams;
 - (D) Samples shall be composited and analyzed at the end of each calendar month;
 - (E) Preparation of the coal sample, heat content analysis, and sulfur content analysis shall be determined pursuant to 326 IAC 3-7-2(c), (d), (e); or
 - (3) Sample and analyze the coal pursuant to 236 IAC 3-7-3.
- (b) Compliance may be determined by conducting a stack test for sulfur dioxide emissions from the boiler in accordance with 326 IAC 3-6, utilizing the procedures in 40 CFR 60, Appendix A, Method 6, 6A, 6C, or 8. [326 IAC 7-2-1(d)]

A determination of noncompliance pursuant to either of the methods specified in (a) or (b) above shall not be refuted by evidence of compliance pursuant to the other method.

- (c) Upon written notification to IDEM by a facility owner or operator, continuous emission monitoring data collected and reported pursuant to 326 IAC 3-5-1 may be used as the means for determining compliance with the emission limitations in 326 IAC 7. Upon such notification, the other requirements of 326 IAC 7 shall not apply. [326 IAC 7-2-1(g)]

D.2.10 Particulate Control

Except as otherwise provided by statute, rule or this permit, each baghouse listed in this section for particulate control shall be in operation at all times when its associated facility/emissions unit is in operation, in order to comply with Conditions D.2.1 and D.2.3.

D.2.11 NESHAP Monitoring Requirements [40 CFR 63, Subpart LLL]

- (a) Pursuant to 40 CFR 63.1350 (Monitoring Requirements), the Permittee shall prepare a written operations and maintenance plan for the material storage building (F03) and each of the raw mills (EU11, EU11A, EU11B, EU12, EU12A, and EU12B) by June 14, 2002, which is the compliance date for the National Emission Standards for Hazardous Air Pollutants (NESHAP) from the Portland Cement Manufacturing Industry. The plan shall include the following information:
- (1) Procedures for proper operation and maintenance of the affected sources and associated air pollution control device(s) in order to meet the emissions limit in Condition D.2.3; and
 - (2) Procedures to be used to periodically monitor the material storage building (F03), which is subject to opacity standards under 40 CFR 63.1348. Such procedures must include the following provisions:
 - (A) The Permittee shall conduct a monthly 1-minute visible emissions test of each affected source in accordance with 40 CFR 60, Appendix A, Method 22. The test must be conducted while the affected source is in operation.
 - (B) If no visible emissions are observed in six consecutive monthly tests for any affected source, the Permittee may decrease the frequency of testing from monthly to semi-annually for that affected source. If visible emissions are observed during any semi-annual test, the Permittee shall resume testing of that affected source on a monthly basis and maintain that schedule until no visible emissions are observed in six consecutive monthly tests.
 - (C) If no visible emissions are observed during the semi-annual test for any affected source, the Permittee may decrease the frequency of testing from semi-annually to annually for that affected source. If visible emissions are observed during any annual test, the Permittee shall resume testing of that affected source on a monthly basis and maintain that schedule until no visible emissions are observed in six consecutive monthly tests.
 - (D) If visible emissions are observed during any Method 22 test, the Permittee must conduct a 6-minute test of opacity in accordance with 40 CFR 60, Appendix A, Method 9. The Method 9 test must begin within one hour of any observation of visible emissions.
 - (3) Corrective actions to be taken when required by paragraph (b).

Failure to comply with any provision of the operations and maintenance plan shall be a violation of the standard. The contents of the operations and maintenance plan are not included in this permit and may be modified by the Permittee without modification or

amendment of this permit.

- (b) Pursuant to 40 CFR 63.1350 (Monitoring Requirements), on and after June 14, 2002, the Permittee shall monitor opacity from the raw mills (EU11, EU11A, EU11B, EU12, EU12A, and EU12B) by conducting daily visual emissions observations of the mill sweep and air separator particulate matter control devices (PMCDs), in accordance with the procedures of 40 CFR 60, Appendix A, Method 22. The Method 22 test shall be conducted while the affected source is operating at the highest load or capacity level reasonably expected to occur within the day. The duration of the Method 22 test shall be six minutes. If visible emissions are observed during any Method 22 visible emissions test, the Permittee must:
- (1) Initiate, within one (1) hour, the corrective actions specified in the site specific operations and maintenance plan developed in accordance with 40 CFR 63.1350(a)(1) and (a)(2); and
 - (2) Within 24 hours of the end of the Method 22 test in which the visible emissions were observed, conduct a visual opacity test of each stack from which visible emissions were observed, in accordance with 40 CFR 60, Appendix A, Method 9. The duration of the Method 9 test shall be thirty minutes.

Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

D.2.12 Visible Emissions Notations

Visible emission notations of all of the baghouse stack exhausts, shall be performed once per shift during normal daylight operations. A trained employee shall record whether emissions from the stacks are normal or abnormal.

- (a) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.
- (b) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.
- (c) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.
- (d) On days that the NESHAP monitoring required in Condition D.2.11 is performed, the Permittee may use those results to satisfy the requirements of this condition for the units subject to the NESHAP.
- (e) The Compliance Response Plan for these units shall contain troubleshooting contingency and response steps for when an abnormal emission is observed. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a violation of this permit.

D.2.13 Parametric Monitoring

The Permittee shall record the total static pressure drop across each baghouse listed in this section, at least once per shift when the associated facility/emissions unit is in operation. When for any one reading, the pressure drop across each baghouse is outside the normal range of 1.0 and 8.0 inches of water or a range established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C - Compliance Response Plan -

Preparation, Implementation, Records, and Reports. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a violation of this permit.

The instrument used for determining the pressure shall comply with Section C - Pressure Gauge and Other Instrument Specifications, of this permit, shall be subject to approval by IDEM, OAQ, and shall be calibrated at least once every six (6) months.

D.2.14 Baghouse Inspections

An inspection shall be performed during the last month of each calendar quarter of all bags controlling the facilities/emissions units listed in this section. All defective bags shall be replaced.

D.2.15 Broken or Failed Bag Detection

In the event that bag failure has been observed.

- (a) For multi-compartment units, the affected compartments will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if there are no visible emissions from the emission unit, control device, or stack, or if the event qualifies as an emergency and the Permittee satisfies the emergency provisions of this permit (Section B- Emergency Provisions). Within eight (8) business hours of the determination of failure, response steps according to the timetable described in the Compliance Response Plan shall be initiated. For any failure with corresponding response steps and timetable not described in the Compliance Response Plan, response steps shall be devised within eight (8) business hours of discovery of the failure and shall include a timetable for completion. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a violation of this permit.
- (b) For single compartment baghouses, if failure is indicated by a significant drop in the baghouse's pressure readings with abnormal visible emissions or the failure is indicated by an opacity violation, or if bag failure is determined by other means, such as gas temperatures, flow rates, air infiltration, leaks, dust traces, or triboflows, then failed units and the associated process will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.2.16 Record Keeping Requirements

- (a) To document compliance with Conditions D.2.4(a) and D.2.9, the Permittee shall maintain records in accordance with (1) through (4) below. Records maintained for (1) through (4) shall be taken monthly and shall be complete and sufficient to establish compliance with the SO₂ emission limits established in D.2.4(a).
 - (1) Calendar dates covered in the compliance determination period;
 - (2) Actual monthly coal usage since last compliance determination period;
 - (3) Calendar month average sulfur content and heat content;
 - (4) Calendar month average sulfur dioxide emission rates.

326 IAC 7-1.1, 7-2 and 326 IAC 3-4, 3-5, 3-6, and 3-7 are not federally enforceable.

- (b) To document compliance with Condition D.2.12, the Permittee shall maintain records of visible emission notations of the baghouse stack exhausts once per shift.
- (c) To document compliance with Condition D.2.13, the Permittee shall maintain records of the inlet and outlet differential static pressure of each baghouse once per shift.
- (d) To document compliance with Condition D.2.14, the Permittee shall maintain records of the results of the inspections required under Condition D.2.14.
- (e) On and after the NESHAP 40 CFR 63, Subpart LLL compliance date, to document compliance with the NESHAP, the Permittee shall maintain all records required by 40 CFR 63.1355. These records include the following:
 - (1) The Permittee shall maintain files of all information (including all reports and notifications) required by 40 CFR 60.1355(a) recorded in a form suitable and readily available for inspection and review as required by 40 CFR 63.10(b)(1).
 - (2) The Permittee shall maintain records for each affected source as required by 40 CFR 63.10(b)(2) and (3) including:
 - (A) All documentation supporting initial notifications and notifications of compliance status under 40 CFR 63.9.
 - (B) All records of applicability determination, including supporting analyses.
- (f) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

D.2.17 Reporting Requirements

- (a) To document compliance with the NESHAP 40 CFR 63, Subpart LLL, the Permittee shall report the information required by 40 CFR 63.1354, including, but not limited to the following:
 - (1) The plan required by Condition D.2.11 shall be submitted to IDEM, OAQ and U.S. EPA by June 14, 2002, which is the compliance date for the National Emission Standards for Hazardous Air Pollutants (NESHAP) from the Portland Cement Manufacturing Industry.
 - (2) As required by 40 CFR 63.10(d)(2), the Permittee shall report the results of performance tests as part of the notification of compliance status, required in Section C - NESHAP Notification and Reporting Requirements.
 - (3) As required by 40 CFR 63.10(d)(3), the Permittee shall report the opacity results from tests required by 40 CFR 63.1349.
 - (4) As required by 40 CFR 63.10(d)(5), if actions taken by the Permittee during a startup, shutdown, or malfunction of an affected source (including actions taken to correct a malfunction) are consistent with the procedures specified in the source's startup, shutdown, and malfunction plan specified in 40 CFR 63.6(e)(3), the Permittee shall state such information in a semiannual report. Reports shall only be required if a startup, shutdown, or malfunction occurred during the reporting period. The startup, shutdown, and malfunction report may be

submitted simultaneously with the excess emissions and continuous monitoring system performance reports.

- (5) Pursuant to 40 CFR 63.10(d)(5)(ii), any time an action taken by the Permittee during a startup, shutdown, or malfunction (including actions taken to correct a malfunction) is not consistent with the procedures in the startup, shutdown, and malfunction plan, the Permittee shall report the actions taken for that event within 2 working days after commencing actions inconsistent with the plan, by telephone call to the OAQ Compliance Section at (317) 233-5674 or facsimile (FAX) transmission at (317) 233-6865. The immediate report shall be followed by a letter within 7 working days after the end of the event, certified by the Permittee, explaining the circumstances of the event, the reasons for not following the startup, shutdown, and malfunction plan, and whether any excess emissions and/or parameter monitoring exceedances are believed to have occurred.
- (b) In addition to being submitted to the address listed in Section C - General Reporting Requirements, all reports and the operations and maintenance plan submitted pursuant to 40 CFR 63, Subpart A shall also be submitted to the U.S. EPA at the following address:
- United States Environmental Protection Agency, Region V
Air and Radiation Division, Regulation Development Branch - Indiana (AR-18J)
77 West Jackson Boulevard
Chicago, Illinois 60604-3590
- Pursuant to 40 CFR 63.10(d), the reports submitted by the Permittee shall include the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).
- (c) A quarterly summary of the information to document compliance with the SO₂ limit specified in Condition D.2.4 shall be submitted to the address listed in Section C - General Reporting Requirements, of this permit, using the reporting form located at the end of this permit, or its equivalent, within thirty (30) days after the end of the quarter being reported. This report submitted by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

SECTION D.3

FACILITY/EMISSION UNIT OPERATION CONDITIONS

Facility/Emissions Unit Description [326 IAC 2-7-5(15)]

The raw mill storage facilities/emissions units, as follows:

- (1) Blending bins, identified as EU13, constructed in 1961, with a combined nominal rate of 250 tons per hour, with PM emissions controlled by two (2) baghouses, identified as RMDC5 and RMDC6, and each exhausting to separate stacks, identified as S-RMDC5 and S-RMDC6, respectively.
- (2) Kiln supply silos, identified as EU14, constructed in 1961, with a combined nominal rate of 250 tons per hour, with PM emissions controlled by two (2) baghouses, identified as RMDC7 and RMDC8, and each exhausting to separate stacks, identified as S-RMDC7 and S-RMDC8, respectively.
- (3) One (1) kiln feed bin #1, identified as EU18, constructed in 1959, with a nominal rate of 66 tons per hour, with PM emissions controlled by one (1) baghouse, identified as KDC1, and exhausting to one (1) stack, identified as S-KDC1.
- (4) One (1) kiln feed bin #2, identified as EU20, constructed in 1959, with a nominal rate of 66 tons per hour, with PM emissions controlled by one (1) baghouse, identified as KDC3, and exhausting to one (1) stack, identified as S-KDC3.
- (5) One (1) kiln feed bin #3, identified as EU22, constructed in 1974, with a nominal rate of 73 tons per hour, with PM emissions controlled by one (1) baghouse, identified as KDC5, and exhausting to one (1) stack, identified as S-KDC5.

The clinker handling facilities/emissions units, as follows:

- (1) One (1) south storage drag, identified as EU25, constructed in 1974, with a nominal rate of 120 tons per hour, with PM emissions controlled by one (1) baghouse, identified as FDC1, and exhausting to one (1) stack, identified as S-FDC1.
- (2) One (1) north clinker tower, identified as EU26a, constructed in 1959, with a nominal rate of 120 tons per hour, with PM emissions controlled by one (1) baghouse, identified as FDC2, and exhausting to one (1) stack, identified as S-FDC2.
- (3) One (1) North storage drag, identified as EU26b, with a nominal rate of 120 tons per hour, with PM emissions controlled by one (1) baghouse, identified as FDC2, constructed in 1959, and exhausting to one (1) stack, identified as S-FDC2.

(The information describing the processes contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Facility/Emissions Unit Description [326 IAC 2-7-5(15)]

- (4) One (1) scrap bin clinker ladder, identified as EU26c, constructed in 1993, with a nominal rate of 120 tons per hour, with PM emissions controlled by one (1) baghouse, identified as FDC2, and exhausting to one (1) stack, identified as S-FDC2.
- (5) One (1) south clinker tower, identified as EU27, constructed in 1974, with a nominal rate of 120 tons per hour, with PM emissions controlled by one (1) baghouse, identified as FDC3, and exhausting to one (1) stack, identified as S-FDC3.
- (6) One (1) hot spout clinker ladder, identified as EU28, constructed in 1993, with a nominal rate of 120 tons per hour, with PM emissions controlled by one (1) baghouse, identified as FDC4, and exhausting to one (1) stack, identified as S-FDC4.
- (7) One (1) pan clinker conveyor, identified as EU29, constructed in 1979, with a nominal rate of 120 tons per hour, with PM emissions controlled by one (1) baghouse, identified as FDC5, and exhausting to one (1) stack, identified as S-FDC5.
- (8) One (1) east clinker ladder, identified as EU30, constructed in 1993, with a nominal rate of 120 tons per hour, with PM emissions controlled by one (1) baghouse, identified as FDC6, and exhausting to one (1) stack, identified as S-FDC6.
- (9) One (1) roll crusher, identified as EU31, constructed in 1987, with a nominal rate of 240 tons per hour, with PM emissions controlled by one (1) baghouse, identified as FDC7, and exhausting to one (1) stack, identified as S-FDC7.

Note: The scrap bin clinker ladder (EU26c), the hot spout clinker ladder (EU28), and the east clinker ladder (EU30) are not emission units; they are flaps which are used to reduce the drop heights from the North clinker tower, the south clinker tower, and the north storage drag, respectively, which reduce particulate emissions.

The finish mill facilities/emissions units, as follows:

- (1) One (1) finish mill #1 with associated feed bin, identified as EU32, constructed in 1959, with a nominal rate of 37 tons per hour, with PM emissions controlled by one (1) baghouse, identified as FDC8, and exhausting to one (1) stack, identified as S-FDC8.
- (2) One (1) finish mill #2 with associated feed bin, identified as EU33, constructed in 1959, with a nominal rate of 37 tons per hour, with PM emissions controlled by one (1) baghouse, identified as FDC9, and exhausting to one (1) stack, identified as S-FDC9.
- (3) One (1) finish mill #3 with associated feed bin, identified as EU34, constructed in 1959, with a nominal rate of 37 tons per hour, with PM emissions controlled by one (1) baghouse, identified as FDC10, and exhausting to one (1) stack, identified as S-FDC10.
- (4) One (1) finish mill #4 with associated feed bin, identified as EU35, constructed in 1974, with a nominal rate of 50 tons per hour, with PM emissions controlled by one (1) baghouse, identified as FDC11, and exhausting to one (1) stack, identified as S-FDC11.
- (5) One (1) finish mill #4 separator, identified as EU36, constructed in 1989, with a nominal rate of 50 tons per hour, with PM emissions controlled by one (1) baghouse, identified as FDC12, and exhausting to one (1) stack, identified as S-FDC12.
- (6) One (1) lime bin, identified as EU38, constructed in 1993, with a nominal rate of 6 tons per hour, with PM emissions controlled by one (1) baghouse, identified as FDC14, and exhausting to one (1) stack, identified as S-FDC14.

(The information describing the processes contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Facility/Emissions Unit Description [326 IAC 2-7-5(15)]

The finish material storage facilities/emissions units, as follows:

- (1) One (1) surge bin, identified as EU37, with a nominal rate of 35 tons per hour, with PM emissions controlled by one (1) baghouse, identified as FDC13, and exhausting to one (1) stack, identified as S-FDC13.
- (2) A north and south silo operation consisting of thirty (30) storage silos, identified as EU39A and EU39B, constructed in 1959, with a nominal rate of 60 tons per hour, with PM emissions controlled by two (2) baghouses, identified as SDC1 and SDC2, and exhausting to two (2) stacks, identified as S-SDC1 and S-SDC2, respectively.
- (3) A silo transfer system, identified as EU40A and EU40B, constructed in 1959, with a nominal rate of 300 tons per hour, with PM emissions controlled by two (2) baghouses, identified as SDC3 and SDC4, and exhausting to two (2) stacks, identified as S-SDC3 and S-SDC4, respectively

The bulk loading and packaging facilities/emissions units, as follows:

- (1) One (1) east truck loadout bin, identified as EU41, constructed in 1959, with a nominal rate of 450 tons per hour, with PM emissions controlled by one (1) baghouse, identified as SDC5, and exhausting to one (1) stack, identified as S-SDC5.
- (2) One (1) east truck vacuolader, identified as EU42, constructed in 1959, with a nominal rate of 450 tons per hour, with PM emissions controlled by one (1) baghouse, identified as SDC6, and exhausting to one (1) stack, identified as S-SDC6.
- (3) One (1) west truck loadout bin, identified as EU43, constructed in 1959, with a nominal rate of 450 tons per hour, with PM emissions controlled by one (1) baghouse, identified as SDC7, and exhausting to one (1) stack, identified as S-SDC7.
- (4) One (1) west truck vacuolader, identified as EU44, constructed in 1959, with a nominal rate of 450 tons per hour, with PM emissions controlled by one (1) baghouse, identified as SDC8, and exhausting to one (1) stack, identified as S-SDC8.
- (5) One (1) truck loadout station, identified as F06, constructed in 1959, with a nominal rate of 30 tons per hour, and exhausting directly to the atmosphere.
- (6) One (1) railroad loadout bin, identified as EU45, constructed in 1959, with a nominal rate of 240 tons per hour, with PM emissions controlled by one (1) baghouse, identified as SDC9, and exhausting to one (1) stack, identified as S-SDC9.
- (7) One (1) articuloader, identified as EU46, constructed in 1959, with a nominal rate of 240 tons per hour, with PM emissions controlled by one (1) baghouse, identified as SDC10, and exhausting to one (1) stack, identified as S-SDC10.
- (8) One (1) packing machine, identified as EU47, constructed in 1984, with a nominal rate of 40 tons per hour, with PM emissions controlled by two (2) baghouses, identified as SDC11 and SDC12, and exhausting to two (2) stacks, identified as S-SDC11 and S-SDC12, respectively.

(The information describing the processes contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.3.1 Particulate [326 IAC 6-3-2]

- (a) Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), the allowable particulate emission rate from the raw mill storage facilities/emissions units (EU13, EU14, EU18, EU20 and EU22) shall not exceed 61.0 pounds per hour (total for all facilities/emission units) when operating at a process weight rate of 250 tons per hour.
- (b) Pursuant to CP093-2770 issued March 3, 1993 and 326 IAC 6-3-2 (Particulate Emission

Limitations for Manufacturing Processes), the allowable particulate emission rate from the clinker preparation facilities/emissions units (EU25, EU26a, EU26b, EU27, and EU29) shall not exceed 53.1 pounds per hour (total for all facilities/emission units) when operating at a combined process weight rate of 120 tons per hour.

- (c) Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), the allowable particulate emission rate from the roll crusher (EU31) shall not exceed 60.5 pounds per hour when operating at a process weight rate of 240 tons per hour.
- (d) Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), the allowable particulate emission rate from finish mill #1 and associated feed bin (EU32) shall not exceed 42 pounds per hour when operating at a process weight rate of 37 tons per hour.
- (e) Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), the allowable particulate emission rate from finish mill #2 and associated feed bin (EU33) shall not exceed 42 pounds per hour when operating at a process weight rate of 37 tons per hour.
- (f) Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), the allowable particulate emission rate from finish mill #3 and associated feed bin (EU34) shall not exceed 42 pounds per hour when operating at a process weight rate of 37 tons per hour.
- (g) Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), the allowable particulate emission rate from finish mill #4, associated feed bin and separator (EU35 and EU36) shall not exceed 45 pounds per hour (total for all facilities/emission units) when operating at a process weight rate of 50 tons per hour.
- (h) Pursuant to CP093-2770 issued March 3, 1993 and 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), the allowable particulate emission rate from the lime bin (EU38) shall not exceed 5.4 pounds per hour when operating at a process weight rate of 1.5 tons per hour.
- (i) Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), the allowable particulate emission rate from the finish material storage facilities/emissions units (EU37, EU39A, EU39B, EU40A, and EU40B) shall not exceed 63.0 pounds per hour (total for all facilities/emission units) when operating at a combined process weight rate of 300 tons per hour.
- (j) Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), the allowable particulate emission rate from the east truck loadout bin and vacuolader (EU41 and EU42) shall not exceed 67.7 pounds per hour (total for all facilities/emission units) when operating at a process weight rate of 450 tons per hour.
- (k) Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), the allowable particulate emission rate from the west truck loadout bin and vacuolader (EU43 and EU44) shall not exceed 67.7 pounds per hour (total for all facilities/emission units) when operating at a process weight rate of 450 tons per hour.
- (l) Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), the allowable particulate emission rate from the railroad loadout bin and articuloader (EU45 and EU46) shall not exceed 60.5 pounds per hour (total for all facilities/emission units) when operating at a process weight rate of 240 tons per hour.
- (m) Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing

Processes), the allowable particulate emission rate from the packing machine (EU47) shall not exceed 43 pounds per hour when operating at a process weight rate of 40 tons per hour.

The pounds per hour limitation for the lime bin (EU38) was calculated with the following equation:

Interpolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$$E = 4.10 P^{0.67} \quad \text{where } E = \text{rate of emission in pounds per hour and} \\ P = \text{process weight rate in tons per hour}$$

The pounds per hour limitations for all the other processes were calculated with the following equation:

Interpolation and extrapolation of the data for the process weight rate in excess of 60,000 pounds per hour shall be accomplished by use of the equation:

$$E = 55.0 P^{0.11} - 40 \quad \text{where } E = \text{rate of emission in pounds per hour; and} \\ P = \text{process weight rate in tons per hour}$$

When the process weight rate exceeds 200 tons per hour, the maximum allowable emissions may exceed the pound per hour limit calculated using the above-referenced equation, provided the concentration of particulate matter in the discharge gases to the atmosphere is less than 0.10 pounds per one thousand (1,000) pounds of gases.

D.3.2 Supersession of a Condition in a Previously Issued Construction Permit [326 IAC 12] [40 CFR 60, Subpart F]

CP 093-2770-00002, issued March 3, 1993 stated that pursuant to the New Source Performance Standards, 326 IAC 12 (40 CFR 60.60 through 60.66) Subpart F, (Standards of Performance for Portland Cement Plants), visible emissions from the hydrated lime feed system (EU38) and the clinker ladders (EU26c, EU28, and EU30) shall not exceed 10% opacity (40 CFR 60.62(c)). However, upon further review, it has been determined that the three clinker ladders (EU28, EU30, and EU26c) which were permitted in CP 093-2770-00002, were updates to existing drop points, which reduced emissions. Therefore, they were not "modifications" as defined in 40 CFR 60.14. Consequently, 40 CFR 60, Subpart F does not apply to the clinker ladders (EU28, EU30, and EU26c).

D.3.3 General Provisions Relating to NESHAP [326 IAC 20-1][40 CFR Part 63, Subpart A]

On and after June 14, 2002, the provisions of 40 CFR Part 63, Subpart A - General Provisions, which are incorporated by reference in 326 IAC 20-1, apply to the raw mill storage facilities/emissions units (EU13, EU14, EU18, EU20 and EU22), the conveyor transfer points associated with the clinker handling facilities/emission units (EU25, EU26a, EU26b, EU27, and EU29) the roll crusher (EU31), the finish mill facilities/emission units (EU32 through EU36 and EU38), and the finish material storage and bulk loading and packaging facilities/emission units (EU37, EU39 through EU47, and F06) described in this section except when otherwise specified in 40 CFR Part 63, Subpart LLL.

D.3.4 NESHAP Emissions Limitation [40 CFR 63, Subpart LLL]

Pursuant to 40 CFR 63.1348 (Emissions Standards and Operating Limits), on and after June 14, 2002, which is the compliance date for the National Emission Standards for Hazardous Air Pollutants (NESHAP) from the Portland Cement Manufacturing Industry, the visible emissions from each of the raw mill storage facilities/emissions units (EU13, EU14, EU18, EU20 and EU22), the conveyor transfer points associated with the clinker handling facilities/emission units (EU25, EU26a, EU26b, EU27, and EU29), the roll crusher (EU31), the finish mill facilities/emission units

(EU32 through EU36, and EU38), and the finish material storage and bulk loading and packaging facilities/emission units (EU37, EU39 through EU47, and F06) shall not exceed ten percent (10%) opacity. On and after June 14, 2002, 326 IAC 5-1-2 shall not apply to the facilities/emission units subject to the opacity limit in this condition.

D.3.5 Determinations of Nonapplicability [40 CFR 60, Subparts A and F] [40 CFR 63, Subparts A and LLL]

- (a) The raw mill storage facilities/emissions units (EU13, EU14, EU18, and EU20), the finish mill facilities/emission units (EU32, EU33, and EU34), the clinker handling facilities (EU25, EU26a, EU26b, EU26c, EU28, EU29, and EU30), and the finish material storage and bulk loading and packaging facilities/emission units (EU37, EU39A, EU39B, EU40A, EU40B, EU41 through EU46 and F06) are not subject to the requirements of the New Source Performance Standards (NSPS), 40 CFR 60, Subparts A and F (Standards of Performance for Portland Cement Plants) because they are not affected facilities under the rule or they were not constructed or modified after the applicability date of August 17, 1971.
- (b) The clinker handling facilities/emission units (EU26c, EU28, and EU30) are not subject to the requirements of the New Source Performance Standards (NSPS), 40 CFR 63, Subparts A and LLL (Standards of Performance for Portland Cement Plants) because they are not affected facilities under the regulation.

D.3.6 Prevention of Significant Deterioration (PSD) [326 IAC 2-2]

In order to render the requirements of PSD not applicable, the following conditions shall apply:

- (a) The PM emissions from the baghouse FDC5 controlling the pan clinker conveyor (EU29) shall not exceed 5.68 pounds per hour.
- (b) The PM emissions from the baghouses SDC11 and SDC 12 controlling the packing machine (EU47) shall not exceed 5.68 pounds per hour.
- (c) The PM emissions from the baghouse FDC7 controlling the roll crusher (EU31) shall not exceed 5.68 pounds per hour.
- (d) The PM emissions from the baghouse FDC12 controlling the finish mill #4 separator (EU36) shall not exceed 5.68 pounds per hour.
- (e) The PM10 emissions from the baghouse FDC12 controlling the finish mill #4 separator (EU36) shall not exceed 3.40 pounds per hour.
- (f) The PM emissions from the baghouse FDC14 controlling the lime bin (EU38) shall not exceed 5.68 pounds per hour.
- (g) The PM10 emissions from the baghouse FDC14 controlling the lime bin (EU38) shall not exceed 3.40 pounds per hour.

Therefore, the requirements of 326 IAC 2-2 (PSD) and 40 CFR 52.21 are not applicable.

D.3.7 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for all control devices listed in this section. If the Operations and Maintenance Plan required by Condition D.3.10 is developed in accordance with Section B - Preventive Maintenance Plan, then once the Operations and Maintenance Plan has been developed, it shall satisfy this condition.

Compliance Determination Requirements

D.3.8 Testing Requirements [326 IAC 2-7-6(1),(6)] [40 CFR 63, Subpart LLL] [326 IAC 2-1.1-11]

- (a) Within 180 days after June 14, 2002, which is the compliance date for the Portland Cement Manufacturing Industry NESHAP, the Permittee shall demonstrate initial compliance with the limit established in Condition D.3.4 by conducting a test in accordance with 40 CFR 63.1349 and Method 9 of 40 CFR Part 60, Appendix A. Testing shall be conducted in accordance with Section C - Performance Testing. These tests shall be repeated at least once every five (5) years from the date of this valid compliance demonstration.
- (b) Within 180 days after issuance of this Part 70 permit, in order to demonstrate compliance with Condition D.3.1(d), (e), (f), and (g), the Permittee shall perform PM testing on the Finish mill #1 (EU32), Finish mill #2 (EU33), Finish mill #3 (EU34), and Finish Mill #4 (EU35). Within 180 days after issuance of this Part 70 permit, in order to demonstrate compliance with Conditions D.3.1 and D.3.6 (d) and (e), the Permittee shall conduct PM and PM10 testing on the finish mill #4 separator (EU36). These tests shall be conducted utilizing methods as approved by the Commissioner. These tests shall be repeated at least once every five (5) years from the date of this valid compliance demonstration. Testing shall be conducted in accordance with Section C- Performance Testing. PM10 includes filterable and condensible PM10. All associated facilities exhausting to a single stack must all be operating when determining compliance with the limit.

D.3.9 Particulate Control

Pursuant to CP093-2770 issued March 3, 1993, except as otherwise provided by statute, rule or this permit, each baghouse listed in this section for particulate control shall be in operation at all times when its associated facility/emissions unit is in operation, in order to demonstrate compliance with Conditions D.3.1, D.3.4, and D.3.6.

D.3.10 NESHAP Monitoring Requirements [40 CFR 63, Subpart LLL]

- (a) Pursuant to 40 CFR 63.1350 (Monitoring Requirements), the Permittee shall prepare a written operations and maintenance plan for the raw mill storage facilities/emissions units (EU13, EU14, EU18, EU20 and EU22), the conveyor transfer points associated with the clinker handling facilities/emission units (EU25, EU26a, EU26b, EU27, and EU29), the clinker handling facility/emission unit described as the roll crusher (EU31), the finish mill facilities/emission units (EU32 through EU36 and EU38), and the finish material storage and bulk loading and packaging facilities/emission units (EU37, EU39 through EU47, and F06) by June 14, 2002, which is the compliance date for the National Emission Standards for Hazardous Air Pollutants (NESHAP) from the Portland Cement Manufacturing Industry. The plan shall include the following information:
 - (1) Procedures for proper operation and maintenance of the affected sources and associated air pollution control device(s) in order to meet the emissions limit in Condition D.3.4; and
 - (2) Procedures to be used to periodically monitor the affected facilities, which are subject to opacity standards under 40 CFR 63.1348. Such procedures must include the following provisions:
 - (A) The Permittee shall conduct a monthly 1-minute visible emissions test on each stack exhaust (S-RMDC5 through S-RMDC8, S-KDC1, S-KDC3, S-KDC5, S-FDC1 through S-FDC3, S-FDC5, S-FDC7, S-FDC13, and S-SDC1 through S-SDC12) associated with the raw mill storage facilities/emissions units (EU13, EU14, EU18, EU20 and EU22), the

conveyor transfer points associated with the clinker handling facilities/emission units (EU25, EU26a, EU26b, EU27, and EU29), the clinker handling facility/emission unit described as the roll crusher (EU31), the finish material storage facilities/emission units (EU37, EU39A, EU39B, EU40A, and EU40B), the bulk loading and packaging facilities/emission units (EU41 through EU47), the lime bin (EU38), and the truck loadout station (F06) in accordance with 40 CFR 60, Appendix A, Method 22. The test must be conducted while the source is in operation.

- (B) If no visible emissions are observed in six consecutive monthly tests for any affected source, the Permittee may decrease the frequency of testing from monthly to semi-annually for that affected source. If visible emissions are observed during any semi-annual test, the Permittee shall resume testing of that affected source on a monthly basis and maintain that schedule until no visible emissions are observed in six consecutive monthly tests.
- (C) If no visible emissions are observed during the semi-annual test for any affected source, the Permittee may decrease the frequency of testing from semi-annually to annually for that affected source. If visible emissions are observed during any annual test, the Permittee shall resume testing of that affected source on a monthly basis and maintain that schedule until no visible emissions are observed in six consecutive monthly tests.
- (D) If visible emissions are observed during any Method 22 test, the Permittee must conduct a 6-minute test of opacity in accordance with 40 CFR 60, Appendix A, Method 9. The Method 9 test must begin within one hour of any observation of visible emissions.

- (3) Corrective actions to be taken when required by paragraph (b).

Failure to comply with any provision of the operations and maintenance plan shall be a violation of the standard. The contents of the operations and maintenance plan are not included in this permit and may be modified by the Permittee without modification or amendment of this permit.

- (b) Pursuant to 40 CFR 63.1350 (Monitoring Requirements), on and after June 14, 2002, the Permittee shall monitor opacity from the finish mills (EU32 through EU36) by conducting daily visual emissions observations of the mill sweep and air separator particulate matter control devices (PMCDs), in accordance with the procedures of 40 CFR 60, Appendix A, Method 22. The Method 22 test shall be conducted while the affected source is operating at the highest load or capacity level reasonably expected to occur within the day. The duration of the Method 22 test shall be six minutes. If visible emissions are observed during any Method 22 visible emissions test, the Permittee must:
 - (1) Initiate, within one (1) hour, the corrective actions specified in the site specific operations and maintenance plan developed in accordance with 40 CFR 63.1350(a)(1) and (a)(2); and
 - (2) Within 24 hours of the end of the Method 22 test in which the visible emissions were observed, conduct a visual opacity test of each stack from which visible emissions were observed, in accordance with 40 CFR 60, Appendix A, Method 9. The duration of the Method 9 test shall be thirty minutes.

Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

D.3.11 Visible Emissions Notations

Visible emission notations of all of the baghouse stack exhausts shall be performed once per shift during normal daylight operations. A trained employee shall record whether emissions are normal or abnormal.

- (a) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.
- (b) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.
- (c) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.
- (d) On days that the NESHAP monitoring required in Condition D.3.10 is performed, the Permittee may use those results to satisfy the requirements of this condition for those facilities monitored.
- (e) The Compliance Response Plan for these units shall contain troubleshooting contingency and response steps for when an abnormal emission is observed. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a violation of this permit.

D.3.12 Parametric Monitoring

The Permittee shall record the total static pressure drop across each baghouse associated with the facilities/emissions units listed in this section, at least once per shift when the associated facility/emission units are in operation and venting to the atmosphere. When for any one reading, the pressure drop across each baghouse is outside the normal range of 1.0 and 8.0 inches of water or a range established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a violation of this permit.

The instrument used for determining the pressure shall comply with Section C - Pressure Gauge and Other Instrument Specifications, of this permit, shall be subject to approval by IDEM, OAQ, and shall be calibrated at least once every six (6) months.

D.3.13 Baghouse Inspections

An inspection shall be performed during the last month of each calendar quarter of all bags controlling the facilities/emissions units listed in this section. All defective bags shall be replaced.

D.3.14 Broken or Failed Bag Detection

In the event that bag failure has been observed.

- (a) For multi-compartment units, the affected compartments will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if

there are no visible emissions from the emission unit, control device, or stack, or if the event qualifies as an emergency and the Permittee satisfies the emergency provisions of this permit (Section B- Emergency Provisions). Within eight (8) business hours of the determination of failure, response steps according to the timetable described in the Compliance Response Plan shall be initiated. For any failure with corresponding response steps and timetable not described in the Compliance Response Plan, response steps shall be devised within eight (8) business hours of discovery of the failure and shall include a timetable for completion. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a violation of this permit.

- (b) For single compartment baghouses, if failure is indicated by a significant drop in the baghouse's pressure readings with abnormal visible emissions or the failure is indicated by an opacity violation, or if bag failure is determined by other means, such as gas temperatures, flow rates, air infiltration, leaks, dust traces, or triboflows, then failed units and the associated process will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).

Record Keeping and Reporting Requirement [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.3.15 Record Keeping Requirements

- (a) To document compliance with Condition D.3.11, the Permittee shall maintain records of visible emission notations of the baghouse stack exhausts once per shift.
- (b) To document compliance with Condition D.3.12, the Permittee shall maintain records of the inlet and outlet differential static pressure of each baghouse once per shift.
- (c) To document compliance with Condition D.3.13, the Permittee shall maintain records of the results of the inspections required under Condition D.3.13.
- (d) To document compliance with the NESHAP 40 CFR 63, Subpart LLL, the Permittee shall maintain all records required by 40 CFR 63.1355. These records include the following:
 - (1) The Permittee shall maintain files of all information (including all reports and notifications) required by 40 CFR 63.1355(a), recorded in a form suitable and readily available for inspection and review as required by 40 CFR 63.10(b)(1).
 - (2) The Permittee shall maintain records for each affected source as required by 40 CFR 63.10(b)(2) and (3) including:
 - (A) All documentation supporting initial notifications and notifications of compliance status under 40 CFR 63.9.
 - (B) All records of applicability determination, including supporting analyses.
- (e) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

D.3.16 Reporting Requirements

- (a) To document compliance with the NESHAP 40 CFR 63, Subpart LLL, the Permittee shall report the information required by 40 CFR 63.1354, including, but not limited to the following:

- (1) The plan required by Condition D.3.10 shall be submitted to IDEM, OAQ and U.S. EPA by June 14, 2002, which is the compliance date for the National Emission Standards for Hazardous Air Pollutants (NESHAP) from the Portland Cement Manufacturing Industry.
 - (2) As required by 40 CFR 63.10(d)(2), the Permittee shall report the results of performance tests as part of the notification of compliance status, required in Section C - NESHAP Notification and Reporting Requirements.
 - (3) As required by 40 CFR 63.10(d)(3), the Permittee shall report the opacity results from tests required by 40 CFR 63.1349.
 - (4) As required by 40 CFR 63.10(d)(5), if actions taken by the Permittee during a startup, shutdown, or malfunction of an affected source (including actions taken to correct a malfunction) are consistent with the procedures specified in the source's startup, shutdown, and malfunction plan specified in 40 CFR 63.6(e)(3), the Permittee shall state such information in a semiannual report. Reports shall only be required if a startup, shutdown, or malfunction occurred during the reporting period. The startup, shutdown, and malfunction report may be submitted simultaneously with the excess emissions and continuous monitoring system performance reports.
 - (5) Pursuant to 40 CFR 63.10(d)(5)(ii), any time an action taken by the Permittee during a startup, shutdown, or malfunction (including actions taken to correct a malfunction) is not consistent with the procedures in the startup, shutdown, and malfunction plan, the Permittee shall report the actions taken for that event within 2 working days after commencing actions inconsistent with the plan, by telephone call to the OAQ Compliance Section at (317) 233-5674 or facsimile (FAX) transmission at (317) 233-6865. The immediate report shall be followed by a letter within 7 working days after the end of the event, certified by the Permittee, explaining the circumstances of the event, the reasons for not following the startup, shutdown, and malfunction plan, and whether any excess emissions and/or parameter monitoring exceedances are believed to have occurred.
- (b) In addition to being submitted to the address listed in Section C - General Reporting Requirements, all reports and the operations and maintenance plan submitted pursuant to 40 CFR 63, Subpart A shall also be submitted to the U.S. EPA at the following address:

United States Environmental Protection Agency, Region V
Air and Radiation Division, Regulation Development Branch - Indiana (AR-18J)
77 West Jackson Boulevard
Chicago, Illinois 60604-3590

Pursuant to 40 CFR 63.10(d), the reports submitted by the Permittee shall include the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

SECTION D.4

FACILITY/EMISSION UNIT OPERATION CONDITIONS

Facility/Emissions Unit Description [326 IAC 2-7-5(15)]

- (1) One (1) kiln #1, identified as EU15, constructed in 1959, with a heat input rate of 118 million Btu per hour, with a nominal production rate of 38 tons per hour, with PM emissions controlled by one (1) electrostatic precipitator (ESP), identified as KP1, and exhausting to one (1) stack, identified as S-KP1. Kiln #1 is also permitted to use a blended fuel of coal and pressed paper making waste where the blend has a maximum of 20% pressed paper making waste by heat input.
- (2) One (1) kiln #2, identified as EU16, constructed in 1959, with a heat input rate of 118 million Btu per hour, with a nominal production rate of 38 tons per hour, with PM emissions controlled by one (1) electrostatic precipitator (ESP), identified as KP2, and exhausting to one (1) stack, identified as S-KP1. Kiln #2 is also permitted to use a blended fuel of coal and pressed paper making waste where the blend has a maximum of 20% pressed paper making waste by heat input.
- (3) One (1) kiln #3, identified as EU17, constructed in 1974, with a heat input rate of 118 million Btu per hour, with a nominal production rate of 43 tons per hour, with PM emissions controlled by one (1) electrostatic precipitator (ESP), identified as KP3, and exhausting to one (1) stack, identified as S-KP2. Kiln #3 is also permitted to use a blended fuel of coal and pressed paper making waste where the blend has a maximum of 20% pressed paper making waste by heat input.

(The information describing the processes contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.4.1 Sulfur Dioxide (SO₂) [326 IAC 7-1.1-1] [326 IAC 7-2-1]

Pursuant to 326 IAC 7-1.1 (SO₂ Emissions Limitations) the SO₂ emissions from the combustion of coal in each of the kilns shall not exceed six (6.0) pounds per MMBtu heat input each. Pursuant to 326 IAC 7-2-1, compliance shall be demonstrated on a monthly average. 326 IAC 7-1.1 and 326 IAC 7-2-1 are not federally enforceable.

D.4.2 General Provisions Relating to NESHAP [326 IAC 20-1][40 CFR Part 63, Subpart A]

On and after June 14, 2002, the provisions of 40 CFR Part 63, Subpart A - General Provisions, which are incorporated by reference in 326 IAC 20-1, apply to kiln #1 (EU15), kiln #2 (EU16), and kiln #3 (EU17) except when otherwise specified in 40 CFR Part 63, Subpart LLL.

D.4.3 NESHAP Emissions Limitation [40 CFR 63, Subpart LLL]

Pursuant to 40 CFR 63.1348 (Emissions Standards and Operating Limits), on and after June 14, 2002, which is the compliance date for the National Emission Standards for Hazardous Air Pollutants (NESHAP) from the Portland Cement Manufacturing Industry, kiln #1 (EU15), kiln #2 (EU16), and kiln #3 (EU17) shall be limited as follows:

- (a) Particulate matter (PM) emissions shall be limited to 0.30 pound per ton of feed (dry basis) to the kiln.
- (b) Visible emissions shall be limited to twenty percent (20%) opacity.
- (c) Dioxin/Furan emissions shall be limited to 8.7×10^{-11} grains per dry standard cubic foot (TEQ) corrected to seven percent oxygen; or 1.7×10^{-10} grains per dry standard cubic foot

(TEQ) corrected to seven percent oxygen, when the average of the performance test run average temperatures at the inlet to the particulate matter control device is 400 degrees Fahrenheit or less.

- (d) The kiln shall be operated such that the temperature of the gas at the inlet to the kiln's particulate matter control device does not exceed the average of the run average temperatures determined during the performance tests required in Condition D.4.5.

On and after June 14, 2002, 326 IAC 5-1-2 shall not apply to the facilities/emission units subject to the opacity limit in this condition.

D.4.4 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for each of the kilns facilities/emissions units and the control devices KP1, KP2, and KP3. If the Operations and Maintenance Plan required by Condition D.4.9 is developed in accordance with Section B - Preventive Maintenance Plan, then once the Operations and Maintenance Plan has been developed, it shall satisfy this condition.

Compliance Determination Requirements

D.4.5 NESHAP Testing Requirements [40 CFR 63, Subpart LLL]

Within 180 days after June 14, 2002, which is the compliance date for the Portland Cement Manufacturing Industry NESHAP, the Permittee shall demonstrate initial compliance with the PM, opacity and dioxin/furan limits established in Condition D.4.3 by conducting performance tests in accordance with 40 CFR 63.1349 and Section C - Performance Testing. The tests for PM and dioxin/furans shall be repeated at least once every 2.5 years from the date of this valid compliance demonstration. The Permittee is also required to repeat the performance tests for particulate matter and dioxins/furans within 90 days of initiating any significant change in the feed or fuel from that used in the previous test. These tests shall be conducted in accordance with Section C - Performance Testing. Pursuant to 40 CFR 63.7(e), the tests shall be conducted under representative operating conditions.

D.4.6 Particulate Control

Except as otherwise provided by statute, rule or this permit, the ESPs (KP1, KP2, and KP3) for PM control shall be in operation at all times when the associated kiln is in operation, in order to demonstrate compliance with Condition D.4.3.

D.4.7 Sulfur Dioxide Emissions from Coal Combustion and Coal Sulfur Content [326 IAC 2-7-5(A)] [326 IAC 2-7-6] [326 IAC 7-1.1] [326 IAC 7-2]

Pursuant to 326 IAC 7-1.1-2, the Permittee shall demonstrate that the sulfur dioxide emissions from coal combustion do not exceed six (6.0) pounds per MMBtu. Pursuant to 326 IAC 7-2, compliance shall be determined utilizing the following methods:

- (a) Coal sampling and analysis shall be performed using one of the following procedures:
- (1) Minimum Coal Sampling Requirements and Analysis Methods [326 IAC 3-7-2(b)(3)]:
 - (A) The coal sample acquisition point shall be at a location where representative samples of the total coal flow to be combusted by the facility or facilities may be obtained. A single as-bunkered or as-burned sampling station may be used to represent the coal to be combusted by multiple facilities using the same stockpile feed system;
 - (B) Coal shall be sampled at least three (3) times per day and at least one (1)

time per eight (8) hour period unless no coal is bunkered during the preceding eight (8) hour period;

- (C) Minimum sample size shall be five hundred (500) grams;
 - (D) Samples shall be composited and analyzed at the end of each calendar month;
 - (E) Preparation of the coal sample, heat content analysis, and sulfur content analysis shall be determined pursuant to 326 IAC 3-7-2(c), (d), (e);
- (2) Sample the coal pursuant to 326 IAC 3-7-2(a). Preparation of the coal sample, heat content analysis, and sulfur content analysis shall be determined pursuant to 326 IAC 3-7-2(c), (d) and (e);
 - (3) Sample and analyze the coal pursuant to 236 IAC 3-7-3.
- (b) Compliance may be determined by conducting a stack test for sulfur dioxide emissions from the boiler in accordance with 326 IAC 3-6, utilizing the procedures in 40 CFR 60, Appendix A, Method 6, 6A, 6C, or 8. [326 IAC 7-2-1(d)]

A determination of noncompliance pursuant to either of the methods specified in (a) or (b) above shall not be refuted by evidence of compliance pursuant to the other method.

- (c) Upon written notification to IDEM by a facility owner or operator, continuous emission monitoring data collected and reported pursuant to 326 IAC 3-5-1 may be used as the means for determining compliance with the emission limitations in 326 IAC 7. Upon such notification, the other requirements of 326 IAC 7 shall not apply. [326 IAC 7-2-1(g)]

D.4.8 Continuous Emissions Monitoring [326 IAC 3-5] [326 IAC 2-7-6(1),(6)] [40 CFR 63, Subpart LLL]

Pursuant to 326 IAC 3-5 (Continuous Monitoring of Emissions), 326 IAC 2-1.1-11 and 40 CFR Part 63, a continuous monitoring system shall be installed, calibrated, maintained, and operated for measuring the opacity from the stacks associated with each of the kilns (S-KP1 and S-KP2), pursuant to 326 IAC 3-5-2 and 40 CFR 63.8(c). The continuous opacity monitor shall be installed and operational prior to conducting the performance tests required in Condition D.4.5. The continuous opacity monitor shall meet the performance specifications of 326 IAC 3-5-2 and 40 CFR 63.8(c). 326 IAC 3-5 is not federally enforceable.

D.4.9 NESHAP Monitoring Requirements [40 CFR 63, Subpart LLL]

Pursuant to 40 CFR 63.1350 (Monitoring Requirements), on and after June 14, 2002, which is the compliance date for the National Emission Standards for Hazardous Air Pollutants (NESHAP) for the Portland Cement Manufacturing Industry, the Permittee shall perform the following monitoring requirements:

- (a) The Permittee shall have prepared a written operations and maintenance plan for kiln #1 (EU15), kiln #2 (EU16), and kiln #3 (EU17). The plan shall include the following information:
 - (1) Procedures for proper operation and maintenance of kiln #1 (EU15), kiln #2 (EU16), and kiln #3 (EU17) and associated air pollution control device(s) in order to meet the emissions limit in Condition D.4.3; and
 - (2) Procedures to be used during an inspection of the components of the combustion system of kiln #1 (EU15), kiln #2 (EU16), and kiln #3 (EU17) at least once per year.

Failure to comply with any provision of the operations and maintenance plan shall be a violation of the standard. The contents of the operations and maintenance plan are not included in this permit and may be modified by the Permittee without modification or amendment of this permit.

- (b) The Permittee shall conduct an inspection of the components of the combustion system of kiln #1 (EU15), kiln #2 (EU16), and kiln #3 (EU17) at least once per year.
- (c) The Permittee shall continuously monitor opacity of emissions at the outlet of the PM control device. The COM required by Condition D.4.8 shall be used to monitor opacity emissions in accordance with the NESHAP 40 CFR 63, Subpart LLL and shall be installed, maintained, calibrated and operated as required by 40 CFR 63, Subpart A.
- (d) The Permittee shall install, calibrate, maintain, and continuously operate a continuous monitor to record the temperature of the exhaust gases from kiln #1 (EU15), kiln #2 (EU16), and kiln #3 (EU17) at the inlet to, or upstream of the kiln's PM control device.
 - (1) The recorder response range must include zero and 1.5 times either of the average temperatures established according to the requirements in 40 CFR 63.1349(b)(3)(iv).
 - (2) The reference method must be a National Institute of Standards and Technology calibrated reference thermocouple-potentiometer system or alternate reference, subject to approval by the IDEM.
 - (3) The three-hour rolling average temperature shall be calculated as the average of 180 successive one-minute average temperatures.
 - (4) Periods of time when one-minute averages are not available shall be ignored when calculating three-hour rolling averages. When one-minute averages become available, the first one-minute average is added to the previous 179 values to calculate the three-hour rolling average.
 - (5) The calibration of all thermocouples and other temperature sensors shall be verified at least once every three months.

Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

D.4.10 Preventive Inspections

In order to document compliance with the applicable PM and dioxin/furan limits specified in Condition D.4.3 the following inspections shall be performed for each ESP during each annual shutdown, but no less often than once every 14 months, in accordance with the Preventive Maintenance Plan prepared in accordance with Section B - Preventive Maintenance Plan:

- (1) Plate and electrode alignment;
- (2) ESP component/controller failure;
- (3) Air and water infiltration; and
- (4) Calibration of the instruments used to determine the T-R set current and voltages.

All inspections shall be made whenever there is an outage of any nature lasting more than three days unless such measurements have been taken within the past three months.

Appropriate response steps for any failures, malfunctions, or abnormal conditions in the above list found during the inspection shall be taken in accordance with Section C - Compliance Response

Plan - Preparation, Implementation, Records, and Reports. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a violation of this permit.

D.4.11 Parametric Monitoring

- (a) The ability of the ESPs to control particulate emissions shall be monitored once per shift, when the units are in operation, by measuring and recording the primary and secondary voltages and the currents of the transformer-rectifier (T-R) sets.
- (b) When for any one reading, the voltage or current is outside one of the normal ranges shown below, or a range established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports. A voltage or current reading outside the normal range is not a deviation from this permit.
 - (1) Primary voltage: 260 - 300 V
 - (2) Secondary voltage: 35 - 55 kV
 - (3) T-R set primary current: 50 - 75 A

Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a violation of this permit.

D.4.12 Opacity Readings

The ability of the ESP to control particulate emissions shall be monitored by continuously measuring and recording the opacity of emissions from each of the kiln stack exhausts (S-KP1 and S-KP2).

- (a) Appropriate response steps shall be taken in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports whenever the opacity exceeds 18 percent for three (3) consecutive six (6) minute averaging periods. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a violation of this permit.
- (b) The opacity shall be determined by the certified continuous opacity monitor required in Condition D.4.8.

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.4.13 Record Keeping Requirements

- (a) In order to document compliance with Conditions D.4.1 and D.4.7, the Permittee shall maintain records in accordance with (1) through (4) below. Records maintained for (1) through (4) shall be taken monthly and shall be complete and sufficient to establish compliance with the SO₂ emission limits established in D.4.1.
 - (1) Calendar dates covered in the compliance determination period;
 - (2) Actual monthly coal usage since last compliance determination period;
 - (3) Calendar month average sulfur content and heat content of coal;
 - (4) Calendar month average sulfur dioxide emission rates in pounds per million Btu of heat input.

326 IAC 7-1.1, 7-2-1, and 326 IAC 3-4, 3-5, 3-6, and 3-7 are not federally enforceable.

- (b) Pursuant to 326 IAC 3-7-5(a), the Permittee shall develop a standard operating procedure (SOP) to be followed for sampling, handling, analysis, quality control, quality assurance, and data reporting of the information collected pursuant to 326 IAC 3-7-2 through 326 IAC 3-7-4. In addition, any revision to the SOP shall be submitted to IDEM, OAQ.
- (c) To document compliance with Conditions D.4.3, D.4.5, D.4.6, D.4.8, D.4.10, D.4.11, and D.4.12, the Permittee shall maintain records in accordance with (1) through (6) below. Records shall be complete and sufficient to establish compliance with the limits established in Section C - Opacity and Conditions D.4.3, D.4.5, D.4.6, D.4.8, D.4.10, D.4.11, and D.4.12.
 - (1) Data and results from the most recent stack test.
 - (2) All continuous emissions monitoring data.
 - (3) All ESP voltage and current monitoring readings.
 - (4) The results of all ESP inspections and the type and number of parts replaced.
 - (5) All preventive maintenance measures taken.
 - (6) All response steps taken and the outcome for each.
- (d) To document compliance with the NESHAP 40 CFR 63, Subpart LLL, the Permittee shall maintain all records required by 40 CFR 63.1355. These records include the following:
 - (1) The Permittee shall maintain files of all information (including all reports and notifications) required by 40 CFR 63.1355(a) recorded in a form suitable and readily available for inspection and review as required by 40 CFR 63.10(b)(1).
 - (2) The Permittee shall maintain records for each affected source as required by 40 CFR 63.10(b)(2) and (3) including:
 - (A) All documentation supporting initial notifications and notifications of compliance status under 40 CFR 63.9.
 - (B) All records of applicability determination, including supporting analyses.
 - (3) The Permittee shall maintain all records of continuous monitoring system data required by 40 CFR 63.10(c).
 - (4) The Permittee shall keep records of the results of the inspections of the components of the combustion systems of kilns #1, #2, and #3, required by 40 CFR 63.1350 and Condition D.4.9(b), at least once per year.
- (e) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

D.4.14 Reporting Requirements

- (a) A quarterly summary of the information to document compliance with the SO₂ limit specified in Condition D.4.1 shall be submitted to the address listed in Section C - General Reporting Requirements, of this permit, using the reporting form located at the end of this permit, or its equivalent, within thirty (30) days after the end of the quarter

being reported. This report submitted by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (b) Beginning June 14, 2002, the Permittee shall submit a continuous monitoring system (CMS) performance report with the excess opacity summaries, in accordance with 40 CFR 63.1354(8) and 40 CFR 63, Subpart A.
- (c) Beginning June 14, 2002, the Permittee shall submit a semi-annual summary report which contains the information specified in 40 CFR 63.10(e)(3)(vi), as well as the following:
 - (1) All exceedances of maximum control device inlet gas temperature limits specified in Condition D.4.3.
 - (2) All failures to calibrate thermocouples and other temperature sensors as required under 40 CFR 63.1350(f)(7).
 - (3) The results of any combustion system component inspections conducted within the reporting period as required by Condition D.4.9(b).
 - (4) All failures to comply with any provision of the operation and maintenance plan developed in accordance with 40 CFR 63.1350(a).

If the total continuous monitoring system (CMS) downtime for any CEM or any CMS for the reporting period is ten percent or greater of the total operating time for the reporting period, the Permittee shall submit an excess emissions and CMS performance report along with the summary report.

- (d) To document compliance with the NESHAP, the Permittee shall report the information required by 40 CFR 63.1354, including, but not limited to the following:
 - (1) The plan required by Condition D.4.9 shall be submitted to IDEM, OAQ and U.S. EPA by June 14, 2002, which is the compliance date for the National Emission Standards for Hazardous Air Pollutants (NESHAP) from the Portland Cement Manufacturing Industry.
 - (2) As required by 40 CFR 63.10(d)(2), the Permittee shall report the results of performance tests as part of the notification of compliance status, required in Section C - NESHAP Notification and Reporting Requirements.
 - (3) As required by 40 CFR 63.10(d)(3), the Permittee shall report the opacity results from tests required by 40 CFR 63.1349.
 - (4) As required by 40 CFR 63.10(d)(5), if actions taken by the Permittee during a startup, shutdown, or malfunction of an affected source (including actions taken to correct a malfunction) are consistent with the procedures specified in the source's startup, shutdown, and malfunction plan specified in 40 CFR 63.6(e)(3), the Permittee shall state such information in a semiannual report. Reports shall only be required if a startup, shutdown, or malfunction occurred during the reporting period. The startup, shutdown, and malfunction report may be submitted simultaneously with the excess emissions and continuous monitoring system performance reports.
 - (5) Pursuant to 40 CFR 63.10(d)(5)(ii), any time an action taken by the Permittee during a startup, shutdown, or malfunction (including actions taken to correct a

malfunction) is not consistent with the procedures in the startup, shutdown, and malfunction plan, the Permittee shall report the actions taken for that event within 2 working days after commencing actions inconsistent with the plan, by telephone call to the OAQ Compliance Section at (317) 233-5674 or facsimile (FAX) transmission at (317) 233-6865. The immediate report shall be followed by a letter within 7 working days after the end of the event, certified by the Permittee, explaining the circumstances of the event, the reasons for not following the startup, shutdown, and malfunction plan, and whether any excess emissions and/or parameter monitoring exceedances are believed to have occurred.

- (e) In addition to being submitted to the address listed in Section C - General Reporting Requirements, all reports and the operations and maintenance plan submitted pursuant to 40 CFR 63, Subpart A shall also be submitted to the U.S. EPA at the following address:

United States Environmental Protection Agency, Region V
Air and Radiation Division, Regulation Development Branch - Indiana (AR-18J)
77 West Jackson Boulevard
Chicago, Illinois 60604-3590

Pursuant to 40 CFR 63.10(d), the reports submitted by the Permittee shall include the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

SECTION D.5

FACILITY/EMISSION UNIT OPERATION CONDITIONS

Facility/Emissions Unit Description [326 IAC 2-7-5(15)]

The clinker cooler facilities/emissions units, as follows:

- (1) One (1) clinker cooler #1, identified as EU19, constructed in 1959, with a nominal rate of 38 tons per hour, with PM emissions controlled by one (1) baghouse, identified as KDC2, and exhausting to one (1) stack, identified as S-KDC2.
- (2) One (1) clinker cooler #2, identified as EU21, constructed in 1959, with a nominal rate of 38 tons per hour, with PM emissions controlled by one (1) baghouse, identified as KDC4, and exhausting to one (1) stack, identified as S-KDC4.
- (3) One (1) clinker cooler #3, identified as EU23, constructed in 1974, with a nominal rate of 43 tons per hour, with PM emissions controlled by one (1) baghouse, identified as KDC6, and exhausting to one (1) stack, identified as S-KDC6.

(The information describing the processes contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.5.1 Determinations of Nonapplicability [40 CFR 60, Subparts A and F]

The clinker coolers #1 and #2 (EU19 and EU21) are not subject to the requirements of the New Source Performance Standards (NSPS), 40 CFR 60, Subparts A and F (Standards of Performance for Portland Cement Plants) because they were constructed prior to the applicability date of August 17, 1971 and have not been modified since the applicability date.

D.5.2 General Provisions Relating to NESHAP [326 IAC 20-1][40 CFR Part 63, Subpart A]

On and after June 14, 2002, the provisions of 40 CFR Part 63, Subpart A - General Provisions, which are incorporated by reference in 326 IAC 20-1, apply to the clinker coolers (EU19, EU21 and EU23) described in this section except when otherwise specified in 40 CFR Part 63, Subpart LLL.

D.5.3 NESHAP Emissions Limitation [40 CFR 63, Subpart LLL]

Pursuant to 40 CFR 63.1348 (Emissions Standards and Operating Limits), on and after June 14, 2002, which is the compliance date for the National Emission Standards for Hazardous Air Pollutants (NESHAP) from the Portland Cement Manufacturing Industry, each clinker cooler (EU19, EU21 and EU23) shall be limited as follows:

- (a) Particulate matter (PM) emissions shall be limited to 0.10 pound per ton of feed (dry basis) to the kiln.
- (b) Visible emissions shall be limited to ten percent (10%) opacity.

On and after June 14, 2002, 326 IAC 5-1-2 shall not apply to the facilities/emission units subject to the opacity limit in this condition.

D.5.4 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for these facilities/emissions units and their control devices listed in this section. If the Operations and Maintenance Plan required by Condition D.5.9 is developed in accordance with Section B - Preventive Maintenance Plan, then once the Operations and Maintenance Plan has been developed, it shall satisfy this condition.

Compliance Determination Requirements

D.5.5 NESHAP Testing Requirements [40 CFR 63, Subpart LLL]

Within 180 days after June 14, 2002, which is the compliance date for the Portland Cement Manufacturing Industry NESHAP, the Permittee shall demonstrate initial compliance with the PM and opacity limits established in Condition D.5.3 by conducting performance tests in accordance with 40 CFR 63.1349 and Section C - Performance Testing. These tests shall be repeated at least once every 2.5 years from the date of this valid compliance demonstration.

D.5.6 Cyclical Testing Requirements [326 IAC 2-7-6(1),(6)] [326 IAC 2-1.1-11]

Within 180 days after issuance of this Part 70 permit, the Permittee shall demonstrate compliance with the PM and opacity limits established in Condition D.5.3, by conducting performance tests for PM from all three clinker coolers, utilizing methods as approved by the Commissioner. Testing shall be conducted in accordance with Section C - Performance Testing.

D.5.7 Continuous Emissions Monitoring [326 IAC 3-5] [326 IAC 2-1.1-11] [40 CFR 63, Subpart LLL]

- (a) Pursuant to 326 IAC 3-5 (Continuous Monitoring of Emissions), 326 IAC 2-1.1-11, and 40 CFR Part 63, a continuous monitoring system shall be installed, calibrated, maintained, and operated for measuring opacity from the clinker coolers (EU19, EU21 and EU23). 326 IAC 3-5 is not federally enforceable.
- (b) The continuous monitoring systems shall meet the performance specifications of 326 IAC 3-5-2 and 40 CFR 63.8(c). 326 IAC 3-5 is not federally enforceable.

D.5.8 Particulate Control

Except as otherwise provided by statute, rule or this permit, each baghouse (KDC2, KDC4 and KDC6) for PM control shall be in operation at all times when its associated clinker cooler is in operation, in order to demonstrate compliance with Condition D.5.3.

D.5.9 NESHAP Monitoring Requirements [40 CFR 63, Subpart LLL]

Pursuant to 40 CFR 63.1350 (Monitoring Requirements), on and after June 14, 2002, which is the compliance date for the National Emission Standards for Hazardous Air Pollutants (NESHAP) from the Portland Cement Manufacturing Industry, the Permittee shall perform the following monitoring requirements:

- (a) The Permittee shall have prepared a written operations and maintenance plan for the clinker coolers (EU19, EU21 and EU23). The plan shall include the procedures for proper operation and maintenance of the clinker coolers (EU19, EU21 and EU23) and associated air pollution control device(s) in order to meet the emissions limit in Condition D.5.3. Failure to comply with any provision of the operations and maintenance plan shall be a violation of the standard. The contents of the operations and maintenance plan are not included in this permit and may be modified by the Permittee without modification or amendment of this permit.
- (b) The Permittee shall continuously monitor opacity of emissions at the outlet of the PM control device. The COM required by Condition D.5.7 shall be used to monitor opacity emissions in accordance with the NESHAP and shall be installed, maintained, calibrated and operated as required by 40 CFR 63, Subpart A and according to 40 CFR 60, Appendix B, PS-1.

Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

D.5.10 Parametric Monitoring

The Permittee shall record the total static pressure drop across each clinker cooler baghouse (KDC2, KDC4 and KDC6), at least once per shift when the associated facility/emissions unit is in operation and venting to the atmosphere. When for any one reading, the pressure drop across each baghouse is outside the normal range of 1.0 and 8.0 inches of water or a range established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a violation of this permit.

The instrument used for determining the pressure shall comply with Section C - Pressure Gauge and Other Instrument Specifications, of this permit, shall be subject to approval by IDEM, OAQ, and shall be calibrated at least once every six (6) months.

D.5.11 Baghouse Inspections

An inspection shall be performed during the last month of each calendar quarter of all bags controlling the clinker coolers. All defective bags shall be replaced.

D.5.12 Broken or Failed Bag Detection

In the event that bag failure has been observed.

- (a) For multi-compartment units, the affected compartments will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if there are no visible emissions from the emission unit, control device, or stack, or if the event qualifies as an emergency and the Permittee satisfies the emergency provisions of this permit (Section B- Emergency Provisions). Within eight (8) business hours of the determination of failure, response steps according to the timetable described in the Compliance Response Plan shall be initiated. For any failure with corresponding response steps and timetable not described in the Compliance Response Plan, response steps shall be devised within eight (8) business hours of discovery of the failure and shall include a timetable for completion. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a violation of this permit.
- (b) For single compartment baghouses, if failure is indicated by a significant drop in the baghouse's pressure readings with abnormal visible emissions or the failure is indicated by an opacity violation, or if bag failure is determined by other means, such as gas temperatures, flow rates, air infiltration, leaks, dust traces, or triboflows, then failed units and the associated process will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).

D.5.13 Opacity Readings

The ability of the baghouses to control particulate emissions shall be monitored by continuously measuring and recording the opacity of emissions from each of the clinker cooler stack exhausts (S-KDC2, S-KDC4, and S-KDC6).

- (a) Appropriate response steps shall be taken in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports whenever the opacity exceeds 8 percent for three (3) consecutive six (6) minute averaging periods.

Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a violation of this permit.

- (b) The opacity shall be determined by the certified continuous opacity monitor required in Condition D.5.7.

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.5.14 Record Keeping Requirements

- (a) To document compliance with Conditions D.5.3, D.5.5, D.5.6, and D.5.7, the Permittee shall maintain records in accordance with (1) and (2) below.
 - (1) Data and results from the most recent stack test.
 - (2) All continuous emissions monitoring data.
- (b) To document compliance with Condition D.5.10, the Permittee shall maintain records of the inlet and outlet differential static pressure of each baghouse once per shift.
- (c) To document compliance with Condition D.5.11, the Permittee shall maintain records of the results of the inspections required under Condition D.5.11.
- (d) To document compliance with the NESHAP 40 CFR 63, Subpart LLL, the Permittee shall maintain all records required by 40 CFR 63.1355. These records include the following:
 - (1) The Permittee shall maintain files of all information (including all reports and notifications) required by 40 CFR 63.1355(a) recorded in a form suitable and readily available for inspection and review as required by 40 CFR 63.10(b)(1).
 - (2) The Permittee shall maintain records for each affected source as required by 40 CFR 63.10(b)(2) and (3) including:
 - (A) All documentation supporting initial notifications and notifications of compliance status under 40 CFR 63.9.
 - (B) All records of applicability determination, including supporting analyses.
 - (3) The Permittee shall maintain all records of continuous monitoring system data required by 40 CFR 63.10(c).
- (e) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

D.5.15 Reporting Requirements

- (a) A quarterly summary of excess opacity emissions, as defined in 326 IAC 3-5-7 and 40 CFR 63.10, from the continuous monitoring system shall be submitted to the address listed in Section C - General Reporting Requirements, of this permit, within thirty (30) days after the end of the quarter being reported. If applicable, the excess opacity summary shall also be submitted in accordance with 40 CFR 63.1354(8) (beginning June 14, 2002).
- (b) Beginning June 14, 2002, the Permittee shall submit a continuous monitoring system (CMS) performance report with the excess opacity summaries, in accordance with 40 CFR 63.1354(8) and 40 CFR 63, Subpart A.

- (c) Beginning June 14, 2002, the Permittee shall submit a semi-annual summary report which contains the information specified in 40 CFR 63.10(e)(3)(vi), as well as all failures to comply with any provision of the operation and maintenance plan developed in accordance with 40 CFR 63.1350(a). If the total continuous monitoring system (CMS) downtime for any CEM or any CMS for the reporting period is ten percent or greater of the total operating time for the reporting period, the Permittee shall submit an excess emissions and CMS performance report along with the summary report.
- (d) To document compliance with the NESHAP 40 CFR 63, Subpart LLL, the Permittee shall report the information required by 40 CFR 63.1354, including, but not limited to the following:
 - (1) The plan required by Condition D.5.9 shall be submitted to IDEM, OAQ and U.S. EPA by June 14, 2002, which is the compliance date for the National Emission Standards for Hazardous Air Pollutants (NESHAP) from the Portland Cement Manufacturing Industry.
 - (2) As required by 40 CFR 63.10(d)(2), the Permittee shall report the results of performance tests as part of the notification of compliance status, required in Section C - NESHAP Notification and Reporting Requirements.
 - (3) As required by 40 CFR 63.10(d)(3), the Permittee shall report the opacity results from tests required by 40 CFR 63.1349.
 - (4) As required by 40 CFR 63.10(d)(5), if actions taken by the Permittee during a startup, shutdown, or malfunction of an affected source (including actions taken to correct a malfunction) are consistent with the procedures specified in the source's startup, shutdown, and malfunction plan specified in 40 CFR 63.6(e)(3), the Permittee shall state such information in a semiannual report. Reports shall only be required if a startup, shutdown, or malfunction occurred during the reporting period. The startup, shutdown, and malfunction report may be submitted simultaneously with the excess emissions and continuous monitoring system performance reports.
 - (5) Pursuant to 40 CFR 63.10(d)(5)(ii), any time an action taken by the Permittee during a startup, shutdown, or malfunction (including actions taken to correct a malfunction) is not consistent with the procedures in the startup, shutdown, and malfunction plan, the Permittee shall report the actions taken for that event within 2 working days after commencing actions inconsistent with the plan, by telephone call to the OAQ Compliance Section at (317) 233-5674 or facsimile (FAX) transmission at (317) 233-6865. The immediate report shall be followed by a letter within 7 working days after the end of the event, certified by the Permittee, explaining the circumstances of the event, the reasons for not following the startup, shutdown, and malfunction plan, and whether any excess emissions and/or parameter monitoring exceedances are believed to have occurred.
- (e) In addition to being submitted to the address listed in Section C - General Reporting Requirements, all reports and the operations and maintenance plan submitted pursuant to 40 CFR 63, Subpart A shall also be submitted to the U.S. EPA at the following address:

United States Environmental Protection Agency, Region V
Air and Radiation Division, Regulation Development Branch - Indiana (AR-18J)
77 West Jackson Boulevard
Chicago, Illinois 60604-3590

Pursuant to 40 CFR 63.10(d), the reports submitted by the Permittee shall include the

certification by the “responsible official” as defined by 326 IAC 2-7-1(34).

SECTION D.6

FACILITY/EMISSION UNIT OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]

Insignificant Activity

Degreasing operations that do not exceed 145 gallons per 12 months, except if subject to 326 IAC 20-6 including one parts washer constructed in 1991.

(The information describing the processes contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.6.1 Volatile Organic Compounds (VOC)

Pursuant to 326 IAC 8-3-2 (Cold Cleaner Operations), for cold cleaning operations constructed after January 1, 1980, the Permittee shall:

- (a) Equip the cleaner with a cover;
- (b) Equip the cleaner with a facility for draining cleaned parts;
- (c) Close the degreaser cover whenever parts are not being handled in the cleaner;
- (d) Drain cleaned parts for at least fifteen (15) seconds or until dripping ceases;
- (e) Provide a permanent, conspicuous label summarizing the operation requirements;
- (f) Store waste solvent only in covered containers and not dispose of waste solvent or transfer it to another party, in such a manner that greater than twenty percent (20%) of the waste solvent (by weight) can evaporate into the atmosphere.

D.6.2 Volatile Organic Compounds (VOC)

- (a) Pursuant to 326 IAC 8-3-5(a) (Cold Cleaner Degreaser Operation and Control), for a cold cleaner degreaser facility, constructed after July 1, 1990, The Permittee shall ensure that the following control equipment requirements are met:
 - (1) Equip the degreaser with a cover. The cover must be designed so that it can be easily operated with one (1) hand if:
 - (A) The solvent volatility is greater than two (2) kiloPascals (fifteen (15) millimeters of mercury or three-tenths (0.3) pounds per square inch) measured at thirty-eight degrees Celsius (38°C) (one hundred degrees Fahrenheit (100°F));
 - (B) The solvent is agitated; or
 - (C) The solvent is heated.
 - (2) Equip the degreaser with a facility for draining cleaned articles. If the solvent volatility is greater than four and three-tenths (4.3) kiloPascals (thirty-two (32) millimeters of mercury or six-tenths (0.6) pounds per square inch) measured at thirty-eight degrees Celsius (38°C) (one hundred degrees Fahrenheit (100°F)), then the drainage facility must be internal such that articles are enclosed under

the cover while draining. The drainage facility may be external for applications where an internal type cannot fit into the cleaning system.

- (3) Provide a permanent, conspicuous label which lists the operating requirements outlined in subsection (b).
 - (4) The solvent spray, if used, must be a solid, fluid stream and shall be applied at a pressure which does not cause excessive splashing.
 - (5) Equip the degreaser with one (1) of the following control devices if the solvent volatility is greater than four and three-tenths (4.3) kiloPascals (thirty-two (32) millimeters of mercury or six-tenths (0.6) pounds per square inch) measured at thirty-eight degrees Celsius (38°C) (one hundred degrees Fahrenheit (100°F)), or if the solvent is heated to a temperature greater than forty-eight and nine-tenths degrees Celsius (48.9°C) (one hundred twenty degrees Fahrenheit (120°F)):
 - (A) A freeboard that attains a freeboard ratio of seventy-five hundredths (0.75) or greater.
 - (B) A water cover when solvent is used is insoluble in, and heavier than, water.
 - (C) Other systems of demonstrated equivalent control such as a refrigerated chiller or carbon adsorption. Such systems shall be submitted to the U.S. EPA as a SIP revision.
- (b) Pursuant to 326 IAC 8-3-5(b) (Cold Cleaner Degreaser Operation and Control), the owner or operator of a cold cleaning facility, construction of which commenced after July 1, 1990, shall ensure that the following operating requirements are met:
- (1) Close the cover whenever articles are not being handled in the degreaser.
 - (2) Drain cleaned articles for at least fifteen (15) seconds or until dripping ceases.
 - (3) Store waste solvent only in covered containers and prohibit the disposal or transfer of waste solvent in any manner in which greater than twenty percent (20%) of the waste solvent by weight could evaporate.

D.6.3 Determination of Nonapplicability [40 CFR 63.460 (Subpart T)] [40 CFR 60, Subparts A and F] [40 CFR 63, Subparts A and LLL]

- (a) None of the parts washers specifically listed in this section are subject to the requirements of the National Emissions Standards for Hazardous Air Pollutants (NESHAP) 326 IAC 20-1, 40 CFR 63.460 (Subpart T) because they do not utilize a solvent containing methylene chloride, perchloroethylene, trichloroethylene, 1,1,1-trichloroethane, carbon tetrachloride, or chloroform, or any combination of these halogens, in a total concentration greater than five percent by weight.
- (b) The parts washers at this source are not subject to the requirements of the New Source Performance Standards (NSPS), 40 CFR 60, Subparts A and F (Standards of Performance for Portland Cement Plants) because they are not considered affected facilities under this rule.
- (c) The parts washers at this source are not subject to the requirements of the National

Emissions Standards for Hazardous Air Pollutants (NESHAP) 40 CFR 63 Subparts A and LLL, because they are not considered affected facilities under this rule.

SECTION D.7

FACILITY/EMISSION UNIT OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]

Insignificant PM emitting facilities/emission units including the following:

- (a) Portable welding, and
- (b) refractory work.

(The information describing the processes contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.7.1 Particulate [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), the allowable particulate emission rates from the above listed processes shall not exceed the pounds per hour limitations as calculated with the following equation:

Interpolation of the data for the process weight rate up to 60,000 pounds per hour shall be accomplished by use of the equation:

$$E = 4.10 P^{0.67}$$

where E = rate of emission in pounds per hour; and
P = process weight rate in tons per hour

D.7.2 Determination of Nonapplicability [40 CFR 60, Subparts A and F] [40 CFR 63, Subparts A and LLL]

- (a) The facilities/emission units specifically listed in this section are not subject to the requirements of the New Source Performance Standards (NSPS), 40 CFR 60, Subparts A and F (Standards of Performance for Portland Cement Plants) because they are not considered affected facilities under this rule.
- (b) The facilities/emission units specifically listed in this section are not subject to the requirements of the National Emissions Standards for Hazardous Air Pollutants (NESHAP) 40 CFR 63 Subparts A and LLL, because they are not considered affected facilities under this rule.

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE DATA SECTION

PART 70 OPERATING PERMIT
CERTIFICATION**

Source Name: Lehigh Portland Cement Company
Source Address: 121 North First Street, Mitchell, Indiana 47446
Mailing Address: P.O. Box 97, Mitchell, Indiana 47446
Part 70 Permit No.: T093-5990-00002

This certification shall be included when submitting monitoring, testing reports/results or other documents as required by this permit.

Please check what document is being certified:

- 9 Annual Compliance Certification Letter
- 9 Test Result (specify) _____
- 9 Report (specify) _____
- 9 Notification (specify) _____
- 9 Affidavit (specify) _____
- 9 Other (specify) _____

I certify that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

Signature:

Printed Name:

Title/Position:

Date:

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE DATA SECTION
P.O. Box 6015
100 North Senate Avenue
Indianapolis, Indiana 46206-6015
Phone: 317-233-5674
Fax: 317-233-5967**

**PART 70 OPERATING PERMIT
EMERGENCY OCCURRENCE REPORT**

Source Name: Lehigh Portland Cement Company
Source Address: 121 North First Street, Mitchell, Indiana 47446
Mailing Address: P.O. Box 97, Mitchell, Indiana 47446
Part 70 Permit No.: T093-5990-00002

This form consists of 2 pages

Page 1 of 2

- 9** This is an emergency as defined in 326 IAC 2-7-1(12)
- C** The Permittee must notify the Office of Air Quality (OAQ), within four **(4)** business hours (1-800-451-6027 or 317-233-5674, ask for Compliance Section); and
 - C** The Permittee must submit notice by mail or facsimile within two **(2)** working days (Facsimile Number: 317-233-5967), and follow the other requirements of 326 IAC 2-7-16.

If any of the following are not applicable, mark N/A

Facility/Equipment/Operation:

Control Equipment:

Permit Condition or Operation Limitation in Permit:

Description of the Emergency:

Describe the cause of the Emergency:

If any of the following are not applicable, mark N/A

Page 2 of 2

Date/Time Emergency started:
Date/Time Emergency was corrected:
Was the facility being properly operated at the time of the emergency? Y N Describe:
Type of Pollutants Emitted: TSP, PM-10, SO ₂ , VOC, NO _x , CO, Pb, other:
Estimated amount of pollutant(s) emitted during emergency:
Describe the steps taken to mitigate the problem:
Describe the corrective actions/response steps taken:
Describe the measures taken to minimize emissions:
If applicable, describe the reasons why continued operation of the facilities are necessary to prevent imminent injury to persons, severe damage to equipment, substantial loss of capital investment, or loss of product or raw materials of substantial economic value:

Form Completed by: _____

Title / Position: _____

Date: _____

Phone: _____

A certification is not required for this report.

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE DATA SECTION**

Part 70 Quarterly Report for Use When Combusting Coal

Source Name: Lehigh Portland Cement Company
Source Address: 121 North First Street, Mitchell, Indiana 47446
Mailing Address: P.O. Box 97, Mitchell, Indiana 47446
Part 70 Permit No.: T093-5990-00002
Facility: Kilns #1, 2, and 3 and Coal Stoker
Parameter: Sulfur Dioxide (SO₂) from coal combustion
Limit: 6.0 pounds per million Btu heat input

FACILITY: _____ YEAR: _____

Month	Monthly Average Coal Sulfur Content (%)	Monthly Average Coal Heat Content (MMBtu/lb)	Coal Consumption (Tons)	Equivalent Sulfur Dioxide Emissions (lbs/MMBtu)

9 No deviation occurred in this quarter.

9 Deviation/s occurred in this quarter.
Deviation has been reported on: _____

Submitted by: _____
Title / Position: _____
Signature: _____
Date: _____
Phone: _____

Attach a signed certification to complete this report.

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE DATA SECTION**

**PART 70 OPERATING PERMIT
QUARTERLY DEVIATION AND COMPLIANCE MONITORING REPORT**

Source Name: Lehigh Portland Cement Company
Source Address: 121 North First Street, Mitchell, Indiana 47446
Mailing Address: P.O. Box 97, Mitchell, Indiana 47446
Part 70 Permit No.: T093-5990-00002

Months: _____ to _____ Year: _____

Page 1 of 2

This report shall be submitted quarterly based on a calendar year. Any deviation from the requirements, the date(s) of each deviation, the probable cause of the deviation, and the response steps taken must be reported. Deviations that are required to be reported by an applicable requirement shall be reported according to the schedule stated in the applicable requirement and do not need to be included in this report. Additional pages may be attached if necessary. If no deviations occurred, please specify in the box marked "No deviations occurred this reporting period".

9 NO DEVIATIONS OCCURRED THIS REPORTING PERIOD.

9 THE FOLLOWING DEVIATIONS OCCURRED THIS REPORTING PERIOD

Permit Requirement (specify permit condition #)

Date of Deviation:

Duration of Deviation:

Number of Deviations:

Probable Cause of Deviation:

Response Steps Taken:

Permit Requirement (specify permit condition #)

Date of Deviation:

Duration of Deviation:

Number of Deviations:

Probable Cause of Deviation:

Response Steps Taken:

Permit Requirement (specify permit condition #)	
Date of Deviation:	Duration of Deviation:
Number of Deviations:	
Probable Cause of Deviation:	
Response Steps Taken:	

Permit Requirement (specify permit condition #)	
Date of Deviation:	Duration of Deviation:
Number of Deviations:	
Probable Cause of Deviation:	
Response Steps Taken:	

Permit Requirement (specify permit condition #)	
Date of Deviation:	Duration of Deviation:
Number of Deviations:	
Probable Cause of Deviation:	
Response Steps Taken:	

Form Completed By: _____

Title/Position: _____

Date: _____

Phone: _____

Attach a signed certification to complete this report.

Indiana Department of Environmental Management Office of Air Quality

Addendum to the Technical Support Document for a Part 70 Operating Permit

Source Name: Lehigh Portland Cement Company
Source Location: 121 North First Street, Mitchell, Indiana 47446
County: Lawrence
SIC Code: 3241
Operation Permit No.: T093-5990-00002
Permit Reviewer: Nisha Sizemore

On September 1, 2001, the Office of Air Quality (OAQ) had a notice published in the Times-Mail, Bedford, Indiana, stating that Lehigh Portland Cement Company had applied for a Part 70 Operating Permit to operate a portland cement plant. The notice also stated that OAQ proposed to issue a permit for this operation and provided information on how the public could review the proposed permit and other documentation. Finally, the notice informed interested parties that there was a period of thirty (30) days to provide comments on whether or not this permit should be issued as proposed.

On October 15, 2001 and September 17, 2002, Lehigh Portland Cement Company ("Lehigh") submitted comments on the proposed Part 70 permit. The summary of the comments is as follows:

GENERAL COMMENTS

Comment #1

Consistent with the Preamble to the NESHAP for Portland Cement Manufacturing Industry, 40 CFR Part 63, Subpart LLL, published in the June 14, 1999 Federal Register, Vol. 64, No. 113, all references to "June 10, 2002" should be changed to "June 14, 2002" or "the effective date of the NESHAP for Portland Cement Manufacturing Industry." The Preamble states that the final rule gives existing sources three (3) years from the promulgation of the final rule to comply and specifically states the effective date of the NESHAP is June 14, 2002.

Additionally, on September 7, 2001, the U.S. Department of Justice signed a Settlement Agreement ("Settlement Agreement") between the American Portland Cement Alliance ("APCA") and the U.S. EPA regarding the APCA's Petition For Review of the final NESHAP rule pending before the United States Court of Appeals for the District of Columbia Circuit, Case No. 99-1322. A copy of the Settlement Agreement was previously furnished to the IDEM. The provisions of the Settlement Agreement are binding upon both the U.S. EPA and the APCA. In the Settlement Agreement the U.S. EPA has agreed that the compliance date for existing sources is June 14, 2002 and has agreed to amend 40 CFR § 63.1351 accordingly.

Response #1

Amendments to 40 CFR 63.1351(a) which were finalized on April 5, 2002, clarified that the compliance date for an existing affected source subject to this NESHAP is June 14, 2002. IDEM has changed the permit to reference June 14, 2002 as the compliance date for the NESHAP, instead of June 10, 2002. This change has been made throughout the permit.

Comment #2

Any permit condition based on a rule and/or portions of a rule which have not been approved by the U.S. EPA as a revision to the Indiana State Implementation Plan ("SIP") is not federally enforceable and the condition should specifically state that the condition is not federally enforceable as required by 326 IAC 2-7-5(1)(G). According to IDEM's Federally Approved State Rules - State Implementation Plan Table (dated October 22, 2001) and U.S. EPA Region V's State Implementation Plans website (updated as of February 7, 2002), the following regulations have not been approved by the U.S. EPA as a revision to the SIP.

- a. 326 IAC 5-1-1, 5-1-2, 5-1-3, 5-1-4, 5-1-5 and 5-1-7, Opacity; Boiler Start up, Shutdown (Attachment 1 indicates the portions of the foregoing rules which are not federally enforceable); and
- b. 326 IAC 3-4, 3-5, 3-6 and 3-7, Continuous Monitoring Requirements.

Response #2

The 1998 rule revisions to 326 IAC 5-1 were approved into the SIP on July 16, 2002; therefore, Condition C.2 (Opacity) is federally enforceable.

IDEM agrees that 326 IAC 3-4, 3-5, 3-6, and 3-7 are not federally enforceable. Statements that these rules are not federally enforceable have been added to the permit.

Comment #3

The Title V permit should include a condition which defines the effective date of the permit as the date the issued permit was served on the Permittee. Additionally, all conditions which are triggered upon "receipt of the permit" or "upon issuance of the permit" should use uniform language and refer to the effective date of the permit.

Response #3

Pursuant to IC 13-15-5-3, the permit becomes effective upon issuance; therefore the effective date of the permit and the issuance date of the permit are the same. By stating that conditions are effective upon issuance, the permit clarifies that the permit becomes effective immediately upon issuance. When conditions state that the Permittee must comply with a condition upon receipt of the permit, that means that when the Permittee receives the permit in the mail, they must begin complying with the requirement.

Comment #4

The draft Technical Support Document will need to be revised consistent with the following comments as well as those contained in the Comments to the Technical Support Document.

Response #4

IDEM prefers the Technical Support Document (TSD) to remain unchanged, therefore documenting the reasoning behind the permit conditions as public noticed. This TSD addendum points out and explains the reasoning for any changes to the permit after public notice. This method provides documentation for each step in the permit process.

Comment #5

With the exception of Conditions B.13 and D.3.5, delete all references to construction permits. Pursuant to Condition B.13(b), the Title V Permit shall be the primary document for determining compliance with applicable requirements; supercedes all previously issued operating permits; and incorporates the applicable requirements contained in previously issued construction permits. Referencing prior permits only creates ambiguity and confusion regarding the applicability of the Title V Permit. This affects Conditions D.1.2, D.1.4, D.1.6, D.2.5, D.2.6, D.3.1, D.3.4, D.3.12.

Response #5

Changes to Indiana's Part 70 rules 326 IAC 2-7 became effective on January 19, 2002. This rulemaking corrected the regulatory deficiencies identified in the NOD published in the federal register on December 11, 2001. The rule changes clarify that terms and conditions of previously issued permits are included in Part 70 permit, revised as necessary, or deleted if appropriate. The rule also clarifies that the Part 70 permit supersedes all previously issued permits and registrations. Condition B.14 (Prior Permits Superseded) was added to the permit to implement the intent of the new rule 326 IAC 2-1.1-9.5.

B.14 Prior Permits Superseded [326 IAC 2-1.1-9.5]

(a) **All terms and conditions of previous permits issued pursuant to permitting programs approved into the state implementation plan have been either**

(1) **incorporated as originally stated,**

(2) **revised, or**

(3) **deleted**

by this permit.

(b) **All previous registrations and permits are superseded by this permit.**

Paragraph (b) has been removed from Condition B.13 (Permit Shield). Since B.14 (Prior Permits Superseded) has been added to the permit, it is not necessary for this statement to be in this condition.

B.13 Permit Shield [326 IAC 2-7-15] [326 IAC 2-7-20] [326 IAC 2-7-12]

~~(b) This permit shall be used as the primary document for determining compliance with applicable requirements established by previously issued permits, including the following and those listed in (c):~~

- ~~1. CP093-2770-00002, issued March 3, 1993;~~
- ~~2. CP093-4598-00002, issued February 27, 1998;~~
- ~~3. Amendment 093-11248-00002 to CP093-4598-00002, issued September 9, 1999;~~
- ~~4. Minor Source Modification 093-10597-00002, issued March 1, 1999; and~~
- ~~5. Minor Source Modification 093-11313-00002, issued November 9, 1999.~~

Rule 326 IAC 2-7-5(1)(A) states that "The Part 70 permit shall specify and reference the origin of and authority for each term or condition and identify any difference in form as compared to the applicable requirement upon which the term or condition is based." Additionally, IDEM and EPA have agreed to a

protocol for the procedures IDEM must use when incorporating the provisions of previously issued permits into Part 70 Operating Permits. The protocol states "For each NSR permit term or condition, IDEM will indicate the permit number and the specific NSR program under which it was issued in the permit condition and the Technical Support Document (TSD) for the Title V permit." Therefore, in order to comply with the terms of the EPA-approved protocol, the references to previously issued permits must remain in the Part 70 permit conditions which originated from previously issued permits.

Comment #6

Lehigh appreciates the IDEM's cooperation in eliminating repetitive conditions in the Draft Permit in an effort to reduce the length of the permit and to improve its ease of use. We believe the organization of the permit can be improved to aid both the IDEM's compliance personnel and Lehigh personnel by mirroring Lehigh's production process. Lehigh suggests that Section D of the Draft Permit be organized into ten sections as follows:

Section D.1 - Quarry Activities, Quarry Material Sizing and Cement Kiln Dust Storage and Handling;
Section D.2 - Raw Material Handling and Storage;
Section D.3 - Raw Mills and Raw Mill Storage;
Section D.4 - Kilns #1, #2 and #3;
Section D.5 - Clinker Coolers;
Section D.6 - Clinker Handling;
Section D.7 - Finish Mills and Finish Material Storage;
Section D.8 - Bulk Loading and Packaging;
Section D.9 - Degreasing Operations;
Section D.10 - Portable Welding and Refractory Work.

Response #6

Over the past two years Lehigh has had many opportunities to review various drafts of this permit. During those reviews, Lehigh requested several times that IDEM reorganize the D Sections of the permit. IDEM has complied with many of those requests over the past two years, including several requests to try to consolidate D Sections in order to make the permit shorter. Currently the D Sections of the permit are arranged such that the facilities with similar applicable requirements are located together in a single D Section. Increasing the number of D Sections in the permit would not only result in a much longer permit, but also some D Sections would be almost identical in terms of applicable requirements. Making the permit longer with many repetitive conditions could increase the opportunity for errors in the permit as well as making it more cumbersome to read. There have been no changes to the permit as a result of this comment.

Comment #7

Delete the compliance monitoring provisions for all of the facilities/emission units which require additional monitoring beyond the monitoring required by the NESHAP for the Portland Cement Manufacturing Industry.

Response #7

IDEM has the authority under 326 IAC 2-7-5 to add compliance monitoring provisions to the Part 70 permit, as necessary to assure continuous compliance with all of the emission limitations in the permit. The NESHAP for the Portland Cement Manufacturing Industry does not contain sufficient compliance monitoring requirements to assure continuous compliance with all of the emission limitations contained in the Part 70 permit. For many of the emission units, the NESHAP only requires compliance with an

opacity limit. Therefore, the NESHAP was not intended to provide compliance monitoring provisions adequate to demonstrate compliance with any mass emission rate, such as those required to render PSD not applicable or those required by 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes).

Comment #8

Condition B.12 (Emergency Provisions)

Comment submitted Oct 15, 2001:

As required by 326 IAC 2-7-5(1)(H), the Permit must specify the permit conditions for which the emergency provisions of Condition B.12 are available. Lehigh suggests listing all such permit conditions in Condition B.12. Alternatively, insert as Condition B.12(h): "Unless otherwise specifically provided in this permit, Condition B.12 is available to the Permittee."

Comment submitted Sept 17, 2002:

IDEM staff have advised that Lehigh's Title V permit need not specify the permit conditions for which the emergency provision of 326 IAC 2-7-16 is available in accordance with 326 IAC 2-7-5(1)(H) in order for Lehigh to be able to utilize the emergency provision. Therefore, Lehigh respectfully retracts comment number 8 submitted to the IDEM in response to its September 1, 2001 public draft Title V permit with the understanding that it may raise the affirmative defense set forth in 326 IAC 2-7-16 even though its Title V permit does not specify which limits are health based and which are technology based in accordance with 326 IAC 2-7-5(1)(H).

Response #8

An emergency may constitute an affirmative defense for an action brought for noncompliance with a technology based emission limitation. An emergency is not an affirmative defense for an action brought for noncompliance with a federal or state health-based emission limitation. Therefore, the emergency provisions are available for all conditions that specify limits which are not health-based limits. Since Lehigh has agreed to retract the original request to identify all terms in the permit which are health based and those which are technology based, IDEM has not made such determinations in this permit. Also, rule changes to 326 IAC 2-7-16 made it consistent with 40 CFR 70.6(g). The condition has been revised to reflect those rule changes. The revised condition is shown below.

B.12 Emergency Provisions [326 IAC 2-7-16]

- (a) An emergency, as defined in 326 IAC 2-7-1(12), is not an affirmative defense for an action brought for noncompliance with a federal or state health-based emission limitation; ~~except as provided in 326 IAC 2-7-16.~~
- (b) An emergency, as defined in 326 IAC 2-7-1(12), constitutes an affirmative defense to an action brought for noncompliance with a ~~health-based or~~ technology-based emission limitation if the affirmative defense of an emergency is demonstrated through properly signed, contemporaneous operating logs or other relevant evidence that describe the following:
 - (1) An emergency occurred and the Permittee can, to the extent possible, identify the causes of the emergency;
 - (2) The permitted facility/emissions unit was at the time being properly operated;

- (3) During the period of an emergency, the Permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards or other requirements in this permit;
- (4) For each emergency lasting one (1) hour or more, the Permittee notified IDEM, OAQ, within four (4) daytime business hours after the beginning of the emergency, or after the emergency was discovered or reasonably should have been discovered;

Telephone Number: 1-800-451-6027 (ask for Office of Air Quality,
Compliance Section), or
Telephone Number: 317-233-5674 (ask for Compliance Section)
Facsimile Number: 317-233-5967

- (5) For each emergency lasting one (1) hour or more, the Permittee submitted the attached Emergency Occurrence Report Form, either by mail or facsimile to:

Indiana Department of Environmental Management
Compliance Branch, Office of Air Quality
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

within two (2) working days of the time when emission limitations were exceeded due to the emergency.

The notice fulfills the requirement of 326 IAC 2-7-5(3)(C)(ii) and must contain the following:

- (A) A description of the emergency;
- (B) Any steps taken to mitigate the emissions; and
- (C) Corrective actions taken.

The notification which shall be submitted by the Permittee does not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (6) The Permittee immediately took all reasonable steps to correct the emergency.
- (c) In any enforcement proceeding, the Permittee seeking to establish the occurrence of an emergency has the burden of proof.
- (d) This emergency provision supersedes the malfunction rule, 326 IAC 1-6 (except the requirement for a PMP in 326 IAC 1-6-3), for sources subject to 326 IAC 2-7 after the effective date of 326 IAC 2-7. This permit condition is in addition to any emergency or upset provision contained in any applicable requirement.
- (e) IDEM, OAQ, may require that the Preventive Maintenance Plans required under 326 IAC 2-7-4(c)(10) be revised in response to an emergency.
- (f) Failure to notify IDEM, OAQ, by telephone, facsimile, or other agreed upon method, of an emergency lasting more than one (1) hour in accordance with (b)(4) and (5) of this condition shall constitute a violation of 326 IAC 2-7 and any other applicable rules.

(g) ~~Operations may continue during an emergency only if the following conditions are met:~~

~~(1) If the emergency situation causes a deviation from a technology-based limit, the Permittee may continue to operate the affected emitting facilities/emissions units during the emergency provided the Permittee immediately takes all reasonable steps to correct the emergency and minimize emissions.~~

~~(2) If an emergency situation causes a deviation from a health-based limit, the Permittee may not continue to operate the affected facilities/emissions units unless:~~

~~(A) The Permittee immediately takes all reasonable steps to correct the emergency situation and to minimize emissions; and~~

~~(B) Continued operation of the facilities/emissions units is necessary to prevent imminent injury to persons, severe damage to equipment, substantial loss of capital investment, or loss of product or raw materials of substantial economic value.~~

~~Any operation shall continue no longer than the minimum time required to prevent the situations identified in (g)(2)(B) of this condition.~~

Comment #9

The Table of Contents should be consistent with the titles to the various sections of the permit, including the referenced citations. For example, see D.4.16. Additionally, the Table of Contents needs to be updated consistent with the revisions resulting from the following comments to the Draft Title V Permit.

Response #9

IDEM agrees. The Table of Contents has been modified appropriately.

Comment #10

Please delete the extra hyphen in the citation contained in C.10 of the Table of Contents.

Response #10

The requested change has been made, as shown below.

C.10 Compliance Requirements ~~[326 IAC 2-1.1-11]~~ **[326 IAC 2-1.1-11]**

SECTION A - SOURCE SUMMARY

Comment #11

Consistent with Lehigh's Delegation of Authority for Title V Applications, Certifications and Reports, please replace "Edward Epping" in Condition A.1 with "Plant Manager."

Response #11

The requested change has been made as shown below.

A.1 General Information [326 IAC 2-7-4(c)] [326 IAC 2-7-5(15)] [326 IAC 2-7-1(22)]

The Permittee owns and operates a portland cement manufacturing plant.

Responsible Official: **Edward E. Epping Plant Manager**

Comment #12

Either delete "Major Source, Section 112 of the Clean Air Act" in Condition A.1 or include the following explanation in the Permit: "The Initial Notification submitted to the U.S. Environmental Protection Agency, pursuant to 40 CFR § 63.1353(b)(1) by the Permittee indicated that the source is a major source (as defined at 40 CFR § 63.2) for purposes of the NESHAP. However, since the notification was not based on compliance determination testing, but rather was based on general emission factors and the design and operation of the facility, the Permittee may notify OAQ of the change in its status in the event information acquired in the future, such as stack testing, indicates the source is not a major source but is rather an area source pursuant to the NESHAP."

Response #12

Section 112 of the Clean Air Act defines a "major source" as "any stationary source or group of stationary sources located within a contiguous area and under common control that emits or has the potential to emit considering controls, in the aggregate, 10 tons per year or more of any HAP or 25 tons per year or more of any combination of HAPs..." Lehigh does not have any federally enforceable limits that reduce the potential to emit of any single HAP to below 10 tons per year and emissions of any combination of HAPs to below 25 tons per year; therefore, at this time, Lehigh is considered a "major source" as defined by Section 112 of the Clean Air Act.

EPA clarified in their May 16, 1995 memo titled "Potential to Emit for MACT Standards – Guidance on Timing Issues" that facilities may switch to area source status at any time until the "first compliance date" of the standard. The "first compliance date" is defined as the first date a source must comply with an emission limitation or other substantive regulatory requirement (i.e. work practice measures, housekeeping measures, etc..., but not a notice requirement) in the applicable MACT standard. By that date, to avoid being in violation, a major source must either comply with the standard, or obtain and comply with federally enforceable limits ensuring that actual and potential emissions (emphasis added) are below major source thresholds.¹

The "first compliance date" for the NESHAP 40 CFR 63, Subpart LLL for Portland Cement Plants is June 14, 2002; therefore, if Lehigh wanted to switch to area source status in order to avoid the requirements of this MACT, Lehigh needed to obtain a permit with federally enforceable limits on HAPs emissions prior to June 14, 2002. Lehigh has not submitted an application requesting such limits.

Comment #13

Please insert a space after Condition A.2(s).

¹

See EPA's May 16, 1995 memorandum "Potential to Emit for MACT Standards – Guidance on Timing Issues."

Response #13

The requested change has been made.

Comment #14

The introduction to the Facility/Emission Unit in Condition A.2(k) through (o) should state: "The cement kiln dust storage, disposal, mining and handling facilities/emission units as follows:"

Response #14

The requested change has been made as shown below. This change has also been made in Section D and throughout the permit.

The cement kiln dust storage, **disposal, mining**, and handling facilities/emissions units, as follows:

Comment #15

Condition A.2(m) should reference the "CKD mixer" rather than the "mixer."

Response #15

The requested change has been made. This change has also been made in Section D and throughout the permit.

- (m) One (1) **CKD** mixer, identified as EU24B, with a nominal rate of 104 tons per hour, with PM emissions controlled by one (1) baghouse, identified as KDC7B, and exhausting to one (1) stack, identified as S-KDC7B.

Comment #16

Condition A.2(n) should reference the "CKD truck loadout" rather than the "truck loadout."

Response #16

The requested change has been made. This change has also been made in Section D and throughout the permit.

- (n) One (1) **CKD** truck loadout, identified as F07, constructed in 1999, with a nominal rate of 104 tons per hour, with PM emissions uncontrolled, and exhausting directly to the atmosphere.

Comment #17

Condition A.2(o) should reference the "The CKD disposal and mining facilities" rather than the "CKD storage area."

Response #17

The requested change has been made. This change has also been made in Section D and throughout

the permit.

- (o) **CKD ~~storage area~~ disposal and mining facilities**, identified as F05, with particulate matter emissions uncontrolled, and exhausting directly to the atmosphere.

Comment #18

Insert prior to Condition A.2(s), "One (1) coal unloading building, identified as F08, constructed prior to August 17, 1971, with particulate matter emissions controlled by partial enclosure and exhausting directly to the atmosphere."

Note: Lehigh staff later provided that the coal unloading building was constructed in 1960.

Response #18

The description has been added as item (s) in Section A.2, and also in Section D.2.

- (s) **One (1) coal unloading building, identified as F08, constructed in 1960, with particulate matter emissions controlled by partial enclosure and exhausting directly to the atmosphere.**

Comment #19

Raw material stockpiles of various feed materials such as gypsum, foundry sand, mill scale, and slag are present in an area near the coal pile (F04). Lehigh believes that various raw materials and clinker have been stored in this area for several decades. Lehigh suggests that the descriptions in Condition A.2 and Condition D.2 be modified to include the following:

"Raw material stockpiles collectively, identified as F09, used for temporary storage of various feed materials, including gypsum, foundry sand, mill scale, and slag, with particulate matter emissions uncontrolled, and exhausting to the atmosphere."

Response #19

The description has been added as item (u) in Section A.2, and also in Section D.2.

- (u) **Raw material stockpiles collectively, identified as F09, constructed prior to 1971, used for temporary storage of various feed materials, including gypsum, foundry sand, mill scale, and slag, with particulate matter emissions uncontrolled, and exhausting to the atmosphere.**

Comment #20

To accurately describe the scrap bin clinker ladder, the hot spout clinker ladder and the east clinker ladder, the second part of the note following Condition A.2(jj) should be modified as follows: "they are flaps which are used to reduce the drop heights from the north clinker tower, the south clinker tower and the north storage drag, respectfully, which reduce particulate emissions."

Response #20

The requested change has been made as shown below. These facilities are now items (jj), (kk), and (ll)

in Section A.2 of the permit. This change has also been made in Section D and throughout the permit.

- (jj) One (1) pan clinker conveyor, identified as EU29, constructed in 1979, with a nominal rate of 120 tons per hour, with PM emissions controlled by one (1) baghouse, identified as FDC5, and exhausting to one (1) stack, identified as S-FDC5.
- (kk) One (1) east clinker ladder, identified as EU30, constructed in 1993, with a nominal rate of 120 tons per hour, with PM emissions controlled by one (1) baghouse, identified as FDC6, and exhausting to one (1) stack, identified as S-FDC6.
- (ll) One (1) roll crusher, identified as EU31, constructed in 1987, with a nominal rate of 240 tons per hour, with PM emissions controlled by one (1) baghouse, identified as FDC7, and exhausting to one (1) stack, identified as S-FDC7.

Note: The scrap bin clinker ladder (EU26c), the hot spout clinker ladder (EU28), and the east clinker ladder (EU30) are not emission units; they are flaps which are used to reduce the drop heights from conveyor transfer points **the north clinker tower, the south clinker tower, and the north storage drag, respectively**, which reduces particulate emissions.

Comment #21

Please include "constructed in 1985," after "EU41" in the facility description for the east truck loadout bin in Condition A.2(tt).

Note: Lehigh staff later corrected the date of constructed to 1959.

Response #21

The requested change has been made as shown below. The east truck loadout bin is now item (vv) in Section A.2. This change has also been made in Section D and throughout the permit.

- (vv) One (1) east truck loadout bin, identified as EU41, **constructed in 1959**, with a nominal rate of 450 tons per hour, with PM emissions controlled by one (1) baghouse, identified as SDC5, and exhausting to one (1) stack, identified as S-SDC5

Comment #22

Renumber Condition A.2 as appropriate.

Response #22

The requested change has been made.

Comment #23

The first sentence of Condition A.3 should identify Lehigh's specifically regulated insignificant activities, the degreasing operations, portable welding and refractory work. Therefore, please revise the introduction of Condition A.3 as follows: "This stationary source includes the following specifically regulated insignificant activities: (1) degreasing operations that do not exceed 145 gallons per 12 months, except if subject to 326 IAC 20-6 (326 IAC 8-3-2) (326 IAC 8-3-5); (2) portable welding (326 IAC 6-3-2); and (3) refractory work (326 IAC 6-3-2). This stationary source also includes the following

insignificant activities, as defined in 326 IAC 2-7-1-(21), which are not specifically regulated hereunder." Accordingly, delete (f), (o)(3) and (o)(4) from the remaining list of insignificant activities.

Response #23

The requested change has been made, as shown below.

A.3 Specifically Regulated Insignificant Activities [326 IAC 2-7-1(21)] [326 IAC 2-7-4(c)]
[326 IAC 2-7-5(15)]

(1) **This stationary source includes the following specifically regulated insignificant activities:**

(a) **Degreasing operations that do not exceed 145 gallons per 12 months, except if subject to 326 IAC 20-6. [326 IAC 8-3-2] [326 IAC 8-3-5]**

(b) **Portable welding. [326 IAC 6-3-2]**

(c) **refractory work. [326 IAC 6-3-2]**

(2) This stationary source also includes the following insignificant activities, as defined in 326 IAC 2-7-1(21):

~~(f) Degreasing operations that do not exceed 145 gallons per 12 months, except if subject to 326 IAC 20-6. [326 IAC 8-3-2] [326 IAC 8-3-5]~~

(n) Other categories with emissions below insignificant thresholds as follows:

(1) Two (2) grinding aid storage tanks.

(2) Three (3) Airalon/Airplas storage tanks.

~~(3) Portable welding. [326 IAC 6-3-2]~~

~~(4) refractory work. [326 IAC 6-3-2]~~

SECTION B - GENERAL CONDITIONS

Comment #24

Condition B.2 (Permit Term)

Replace "or this permit" with "to this permit" in the second sentence of Condition B.2.

Response #24

The requested change has been made as shown below.

Changes to Indiana's Part 70 rules 326 IAC 2-7 became effective on January 19, 2002. This rulemaking corrected the regulatory deficiencies identified in the NOD published in the federal register on December 11, 2001. A new rule, 326 IAC 2-1.1-9.5 was added. The new rule clarifies that terms and conditions of previously issued permits are included in Part 70 permit, revised as necessary, or deleted if appropriate. The rule also clarifies that the Part 70 permit supersedes all previously issued permits and registrations.

This rule cite has been added to the title of Condition B.2 as shown below.

Additionally, for clarification purposes, the word "original" has been replaced with "issuance."

B.2 Permit Term [326 IAC 2-7-5(2)] [326 IAC 2-1.1-9.5]

This permit is issued for a fixed term of five (5) years from the ~~original~~ **issuance date of this permit**, as determined in accordance with IC 4-21.5-3-5(f) and IC 13-15-5-3. Subsequent revisions, modifications, or amendments ~~or to~~ this permit do not affect the expiration date.

Comment #25

Condition B.7 (Duty to Supplement and Provide Information)

Please provide the authority for the certification requirements, as required by 326 IAC 2-7-5(1)(A), for the information requested by the IDEM in the first sentence of Condition B.7(b).

Response #25

The first sentence in Condition B.7(b) states "The Permittee shall furnish to IDEM, OAQ, within a reasonable time, any information that IDEM, OAQ, may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit."

The Part 70 rules at 326 IAC 2-7-5(6)(E) and 326 IAC 2-7-4(b) require the submittal of the information referenced in the first sentence of Condition B.7(b). 326 IAC 2-7-6(1) requires that any document required by a Part 70 permit shall contain a certification by a responsible official. Since the Part 70 permit Condition B.7(a) and (b) requires the submittal of this information, it must be certified pursuant to the requirements of 326 IAC 2-7-6(1).

Comment #26

Condition B.10 (Annual Compliance Certification)

Because the Title V Permit will not regulate Lehigh's activities until the permit becomes effective, the initial certification period in Condition B.10(a) should be amended to state that it covers the period from the date the permit becomes effective through December 31 of the same year. Accordingly, please rephrase the second and third sentences of Condition B.10(a) as follows: "The period from the date the permit becomes effective through December 31 of the same year. Subsequent certifications shall cover the time period from January 1 . . ."

Response #26

Pursuant to IC 13-15-5-3, the permit becomes effective upon issuance; therefore the effective date of the permit and the issuance date of the permit are the same. By stating that conditions are effective upon issuance, the permit clarifies that the permit becomes effective immediately upon issuance. IDEM agrees to clarify that the last sentence of paragraph (a) refers to subsequent certifications after the initial certification. The revisions are shown below.

B.10 Annual Compliance Certification [326 IAC 2-7-6(5)]

- (a) The Permittee shall annually submit a compliance certification report which addresses the status of the source's compliance with the applicable terms and conditions contained in this permit, including emission limitations, standards, or work practices. The initial

certification shall cover the time period from the date of final permit issuance through December 31 of the same year **and shall be submitted in letter form no later than July 1 of the following year to the addresses listed below. Subsequent certifications** ~~Certifications~~ shall cover the time period from January 1 to December 31 of the previous year, and shall be submitted in letter form no later than July 1 of each year to:

Comment #27

Condition B.10(c)(1) should be restated as follows: "An appropriate identification of the terms and conditions of this permit that are the basis of the certification, which may be done by reference to the applicable permit condition without restating each permit condition in its entirety."

Response #27

Non-Rule Policy Document Air-007 (First Revision 9/6/02) allows cross-referencing to be used in Title V annual compliance certifications. This enables sources to minimize the length of their compliance certifications by incorporating the Permit and other documents by reference. These detailed instructions are not necessary as part of the permit condition. There have been no changes to Condition B.10 as a result of this comment.

Comment #28

Condition B.11 (Preventive Maintenance Plan)

Because the Title V Permit will not regulate Lehigh's activities until the permit becomes effective, Condition B.11(a) should reference "within ninety (90) days after the effective date of the permit" not "within ninety (90) days after issuance of this permit."

Response #28

Pursuant to IC 13-15-5-3, the permit becomes effective upon issuance; therefore the effective date of the permit and the issuance date of the permit are the same. By stating that the condition is effective 90 days after issuance of the permit, the condition clarifies that the permit becomes effective immediately upon issuance.

Comment #29

We were unable to locate any authority for the requirement to maintain and retain records for preventative maintenance activities for five (5) years in Condition B.11(d). Please note that 326 IAC 2-7-5(3)(B)(ii)(AA) only requires the retention of records supporting required *monitoring data*. It does not require that records of all preventative maintenance be maintained and retained for five (5) years as required in Condition B.11(d). Please clarify Condition B.11(d) by rewording the first sentence as follows: "Records of preventative maintenance supporting required monitoring data shall be retained for a period of at least five (5) years."

Response #29

The rule does not say that the maintenance records required to be maintained are those that support the required monitoring data. The rule 326 IAC 2-7-5(3)(B)(ii)(AA) lists two separate items for which records need to be maintained: (1) all required monitoring data; and (2) support information. The rule goes on to

state that support information includes **all** (emphasis added) calibration and maintenance records. The intent of the condition is to require all of the records of any preventive maintenance that was performed because the preventive maintenance plan required it to be performed. Paragraph (d) of the condition has been revised for clarification purposes.

B.11 Preventive Maintenance Plan [326 IAC 2-7-5(1),(3) and (13)] [326 IAC 2-7-6(1) and (6)]
[326 IAC 1-6-3]

- (d) **Pursuant to 326 IAC 2-7-5(3)(B), records** Records of preventive maintenance performed pursuant to the PMP shall be retained for a period of at least five (5) years. These records shall be kept at the source location for a minimum of three (3) years. The records may be stored elsewhere for the remaining two (2) years as long as they are available upon request. If the Commissioner makes a request for records to the Permittee, the Permittee shall furnish the records to the Commissioner within a reasonable time.

Comment #30

Condition B.12 (Emergency Provisions)

Conditions B.12(b)(4) and (5), and B.12(f) should be modified to include e-mail as an acceptable means of notifying the IDEM of an emergency lasting more than one (1) hour. Condition B.12(f) should be restated as follows: "Failure to notify IDEM, OAQ, by telephone, facsimile, e-mail or other agreed upon method of an emergency lasting more than one (1) hour in compliance with (b)(4) and (5) of this condition shall constitute a violation of 326 IAC 2-7-16 and any other applicable rules."

Response #30

Paragraph (f) of the condition already states that notification can be by "another agreed upon method;" therefore, it is not necessary for the permit to specify every agreed upon method that would be allowed. Additionally, because of possible logistical problems that could occur, IDEM does not agree to accept e-mail as a means of notification of an emergency. There has been no change to Condition B.12 as a result of this comment.

Comment #31

To avoid confusion, Condition B.12(b)(5) should include the phrase "calculated in accordance with IC 4-21.5-3-2(a) and (b)," after "working days."

Response #31

The definition of "working day" in Title 4 of the Indiana Code does not apply to the rules regarding emergencies. The definition of "working day" in Title 4 does not include weekends or holidays because it refers to procedures regarding notices, motions, and filings, which can only be done during the regular office hours of the office in which the act is to be done. For the emergency provisions, this definition is not appropriate because the notification of an emergency should occur within two (2) working days **of the facility that has the emergency**, not within two (2) of IDEM's working days. There has been no change to this condition as a result of this comment.

Comment #32

Condition B.13 (Permit Shield)

It is clear from the Preamble to 40 CFR Part 70 published in the July 21, 1992 Federal Register that the IDEM must make a determination as to the applicable requirements and include same in the Title V permit. "[O]ne of the objectives of the Title V permitting program is to create a single document that serves as a comprehensive statement of a source's obligations for air pollution control." 57 Fed. Reg. 32277. The IDEM is obligated to either expressly determine that the applicable requirements are included in the permit or determine that the requirement is not applicable to Lehigh.

Merely restating the criteria for granting a permit shield as set forth in 326 IAC 2-7-15 does not fulfill the IDEM's obligation and does not implement the permit shield as contemplated by 40 CFR Part 70. As drafted, Condition B.13 conditions the existence of the shield on the specific identification of the applicable requirements in the permit or an express finding of inapplicability.

Consistent with 40 CFR Part 70 and as described in the Preamble and Summary to 40 CFR Part 70, the IDEM must make a determination on applicability and a determination of Lehigh's obligations. The IDEM has labored several years to make certain that all applicable requirements are included in the permit. Now the IDEM needs to unconditionally state in the permit that all applicable requirements have been identified in the permit.

To comply with Part 70 and 327 IAC 2-7-15, Condition B.13(a) should be modified as follows:

- (a) Pursuant to 326 IAC 2-7-15, the Permittee has been granted a permit shield. The permit shield provides that compliance with the conditions of this permit shall be deemed compliance with any applicable requirements as of the effective date of this permit provided that either the applicable requirements are included and specifically identified in this permit or the permit contains an explicit determination or concise summary of a determination that other specifically identified requirements are not applicable. IDEM has determined that all the applicable requirements are included and are specifically identified in this permit. The Indiana statutes from IC 13 and rules from 326 IAC and the federal rules from 40 CFR referenced in conditions in this permit, are those applicable at the time the permit was issued. The issuance or possession of this permit shall not alone constitute a defense against an alleged violation of any law, regulation or standard, except for the requirement to obtain a Part 70 permit under 326 IAC 2-7 or for applicable requirements for which a permit shield has been granted.

This permit shield does not extend to applicable requirements which are promulgated after the date of issuance of this permit unless this permit has been modified to reflect such new requirements.

Response #32

Rule 40 CFR 70.6(f) does not allow the permit shield to apply unconditionally, as requested in this comment. Rule 40 CFR 70.6(f) states that the permitting authority may expressly include in a Part 70 permit a provision stating that compliance with the conditions of the permit shall be deemed in compliance with any applicable requirements as of the date of permit issuance, **provided that:** (i) such applicable requirements are included and are specifically identified in the permit; or (ii) the permitting authority, in acting on the permit application or revision, determines in writing that other requirements specifically identified are not applicable to the source, **and the permit includes the determination or a concise summary thereof** (emphasis added).

Condition B.13(d) and each Section D of this permit list specific requirements that are not applicable to the source and various individual facilities at the source. As allowed pursuant to 40 CFR 70.6(f), this permit does provide a permit shield for those conditions which are specifically listed as "not applicable" in the permit.

Comment #33

On June 14, 2001, the IDEM revoked CP 093-4598-00002, issued February 27, 1998 and A 093-9623-00002, issued April 29, 1998 (an amendment to the construction permit) which allowed Lehigh to burn waste tires as fuel. Please delete the references to these revoked approvals from Condition B.13(b)(2) and (3). Also, renumber Condition B.13(b)(4) as Condition B.13(b)(2) and Condition B.13(b)(5) as Condition B.13(b)(4).

Consistent with the TSD, include the following as Condition B.13(b)(3) and (5): "(3) Exemption 093-9431-00002, issued August 19, 1999" and "(5) Exemption 093-12881-00002, issued March 20, 2001."

Please include "and A093-9623-00002, issued April 29, 1998; 093-11248-00002, issued on September 9, 1999; and 093-11552-00002, issued October 23, 2000," after "CP093-4598-00002" in Condition B.13(d).

Response #33

As stated in response to comment #5, paragraph (b) of Condition B.13 (Permit Shield) has been deleted since the new rule 326 IAC 2-1.1-9.5 and Condition B.14 (Prior Permits Superseded) have clarified that the Part 70 permit supersedes all previously issued permits and registrations.

B.13 Permit Shield [326 IAC 2-7-15] [326 IAC 2-7-20] [326 IAC 2-7-12]

(b) ~~This permit shall be used as the primary document for determining compliance with applicable requirements established by previously issued permits, including the following and those listed in (c):~~

- ~~1. CP093-2770-00002, issued March 3, 1993;~~
- ~~2. CP093-4598-00002, issued February 27, 1998;~~
- ~~3. Amendment 093-11248-00002 to CP093-4598-00002, issued September 9, 1999;~~
- ~~4. Minor Source Modification 093-10597-00002, issued March 1, 1999; and~~
- ~~5. Minor Source Modification 093-11313-00002, issued November 9, 1999.~~

Comment #34

Include "nonapplicability" before "determinations" in the last phrase of the first paragraph of Condition B.13(e).

Condition B.13(e)(3) should state as follows: "The quarry activities, the quarry material sizing, the raw material handling and storage facilities/emission units are not subject . . ."

The first part of Condition B.13(e)(4) should be modified as follows: "None of the other facilities/emission units listed in this permit are subject to the requirements of the NSPS 326 IAC 12, 40 CFR 60.670 (Subpart OOO) because they are not affected facilities and/or because this regulation specifically . . ."

Replace the word "Conditions" in Condition B.13(e)(6) with "Paragraphs" because the referenced provisions are not conditions of Exemption CP 093-9431-00002 and said exemption is not contingent upon compliance with the provisions.

Response #34

IDEM agrees. The requested changes have been made as shown below.

~~(e)~~(d) In addition to the nonapplicability determinations set forth in Sections D of this permit, the IDEM, OAQ has made the following **nonapplicability** determinations regarding this source:

- (1) None of the petroleum storage tanks listed in Section A.3 of this permit are subject to the requirements of the New Source Performance Standard (NSPS) 326 IAC 12 and 40 CFR 60.110 (Subpart K), or 40 CFR 60.110a (Subpart Ka) because all the petroleum storage tanks have capacities less than 40,000 gallons.
- (2) None of the storage tanks listed in Section A.3 of this permit are subject to the NSPS 326 IAC 12, 40 CFR 60.110b (Subpart Kb) because the tanks have capacities less than 10,500 gallons, or do not contain a substance categorized as volatile organic liquid (VOL).
- (3) The quarry activities, **the quarry material sizing facilities/emission units**, and the raw material ~~sizing~~ **handling and storage facilities/emission units** listed in this permit are not subject to the requirements of the NSPS 326 IAC 12, 40 CFR 60.670 (Subpart OOO) because they were constructed prior to the applicability date of August 31, 1983.
- (4) None of the other facilities/emission units listed in this permit are subject to the requirements of the NSPS 326 IAC 12, 40 CFR 60.670 (Subpart OOO) because **they are not affected facilities and/or** this rule specifically exempts facilities that are subject to the requirements of the NSPS, 40 CFR 60.60 (Subpart F), and facilities which follow in the plant process any facility which is subject to the requirements of the NSPS, 40 CFR 60.60 (Subpart F).
- (5) None of the facilities/emission units listed in this permit are subject to the requirements of the NSPS 326 IAC 12, 40 CFR 60.730 (Subpart UUU) because the source does not fit the definition of a mineral processing plant.
- (6) ~~Conditions~~ **Paragraphs** #2 through #7 of exemption CP 093-9431-00002, issued August 19, 1999, list requirements pursuant to Indiana Solid Waste Regulations, 326 IAC 10 and 326 IAC 11. IDEM has not included these requirements in the Part 70 permit because IDEM, OAQ has determined that these conditions are not applicable requirements as defined by 326 IAC 2-7-1(6).

Comment #35

Condition B.15 (Deviations from Permit Requirements and Conditions)

Reword Condition B.15(b)(1) as follows: "An excursion from compliance monitoring parameters as identified in Section D of this permit unless specifically set forth in an applicable requirement."

Delete the last sentence in Condition B.15(b) because no federal or state statute or regulation requires a Compliance Response Plan. Furthermore, "deviations" only occur when the Permittee violates

emissions limitations. Replace the last sentence of Condition B.15(b) with the following; "Permittee's failure to follow response steps may constitute a violation of the permit if the failure to respond causes an exceedance of a permit limit."

Condition B.15(c) is inconsistent with Condition B.15(a). Since emergencies lasting one (1) hour or more are required to be reported within two (2) working days pursuant to Condition B.12(b)(5), such emergencies should not be required to be again reported under Condition B.15 in the Quarterly Deviation and Compliance Monitoring Report. Only emergencies lasting less than one hour resulting in a deviation should be reported under Condition B.15(c).

Response #35

IDEM has worked with members of the Clean Air Act Advisory Council's Permit Committee, Indiana Manufacturing Association, Indiana Chamber of Commerce and individual applicants regarding the Preventive Maintenance Plan, the Compliance Monitoring Plan and the Compliance Response Plan. The plans are fully supported by rules promulgated by the Air Pollution Control Board. The plans are the mechanism each Permittee will use to verify continuous compliance with its permit and the applicable rules and will form the basis for each Permittee's Annual Compliance Certification. Each Permittee's ability to verify continuous compliance with its air pollution control requirements is a central goal of the Title V and FESOP permit programs.

The regulatory authority for and the essential elements of a compliance monitoring plan were clarified in IDEM's Compliance Monitoring Guidance, in May 1996. IDEM originally placed all the preventive maintenance requirements in the permit section titled "Preventive Maintenance Plan." Under that section the Permittee's Preventive Maintenance Plan (PMP) had to set out requirements for the inspection and maintenance of equipment both on a routine basis and in response to monitoring. Routine maintenance was a set schedule of inspections and maintenance of the equipment. The second was inspection and maintenance in response to monitoring that showed that the equipment was not operating in its normal range. This monitoring would indicate that maintenance was required to prevent the exceedance of an emission limit or other permit requirement.

The maintenance plan was to set out the "corrective actions" that the Permittee would take in the event an inspection indicated an "out of specification situation", and also set out the time frame for taking the corrective action. In addition, the PMP had to include a schedule for devising additional corrective actions for out of compliance situations that the source had not predicted in the PMP. All these plans, actions and schedules were part of the Preventive Maintenance Plan, with the purpose of maintaining the Permittee's equipment so that an exceedance of an emission limit or violation of other permit requirements could be prevented.

After the first draft Title V permits were public noticed in July of 1997, IDEM received comments from members of the regulated community regarding many of the draft permit terms, including the PMP requirements. One suggestion was that the corrective action and related schedule requirements be removed from the PMP requirement and placed into some other requirement in the permit. This suggestion was based, in some part, on the desire that a Permittee's maintenance staff handle the routine maintenance of the equipment, and a Permittee's environmental compliance and engineering staff handle the compliance monitoring and steps taken in reaction to an indication that the facility required maintenance to prevent an environmental problem.

IDEM carefully considered this suggestion and agreed to separate the "corrective actions" and related schedule requirements from the PMP. These requirements were placed into a separate requirement, which IDEM named the Compliance Response Plan (CRP). In response to another comment, IDEM changed the name of the "corrective actions" to "response steps." That is how the present CRP

requirements became separated from the PMP requirement, and acquired their distinctive nomenclature.

The Compliance Monitoring Plan is made up of the PMP, the CRP, the compliance monitoring and compliance determination requirements in section D of the permit, and the record keeping and reporting requirements in sections C and D. The section D provisions set out which facilities must comply with the CRP requirement. The authority for the CRP provisions is found at 326 IAC 2-7-5(1), 2-7-5(3), 2-7-5(13), 2-7-6(1), 1-6-3 and 1-6-5.

The Permittee has also commented that paragraph (a) of the condition is inconsistent with paragraph (c) of the condition since emergencies are required to be reported twice. Rule 326 IAC 2-7-16(b)(4) (Emergency Provision) requires notification within four (4) daytime business hours after the beginning or discovery of an emergency, and 326 IAC 2-7-16(b)(5) requires the submittal of a faxed or written notice within 2 working days of the time when emission limitations were exceeded due to the emergency. Rule 326 IAC 2-7-6(1) requires that any document or report required by a Part 70 permit must include a certification by the responsible official. Many applicants have stated that obtaining a certification by the responsible official would cause difficulty in meeting the requirement to submit the report within 2 days. Therefore IDEM and EPA have agreed that the report which is required to be submitted within 2 days of an exceedance does not require a certification by the responsible official. Instead, the emergencies must be reported again in the Quarterly Deviation and Compliance Monitoring Report with a certification by the responsible official. Reporting the emergency again in the Quarterly Deviation and Compliance Monitoring Report fulfills the obligation to satisfy the requirements of 326 IAC 2-7-6(1) which requires reports to be certified.

The IDEM, OAQ, has revised Condition B.15 Deviations from Permit Requirements to address concerns regarding the independent enforceability of permit conditions [see 40 CFR 70.6(a)(6)(i)]. B.15 was revised to remove language that could be considered to grant exemptions from permit requirements and to clarify reporting obligations.

B.15 Deviations from Permit Requirements and Conditions [326 IAC 2-7-5(3)(C)(ii)]

(a) A deviation is an exceedance of a permit limitation or a failure to comply with a requirement of the permit.

~~(a)(b)~~ Deviations from any permit requirements ~~(for emergencies see Section B -- Emergency Provisions)~~, the probable cause of such deviations, and any response steps or preventive measures taken shall be reported to:

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

using the attached Quarterly Deviation and Compliance Monitoring Report, or its equivalent. ~~Deviations that are required to be reported by an applicable requirement shall be reported according to the schedule stated in the applicable requirement and do not need to be included in this report. The notification by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).~~

(b) A deviation is an exceedance of a permit limitation or a failure to comply with a requirement of the permit or a rule. It does not include:

~~(1) An excursion from compliance monitoring parameters as identified in Section D of this permit unless tied to an applicable rule or limit; or~~

- ~~(2) Failure to implement elements of the Preventive Maintenance Plan unless such failure has caused or contributed to a deviation.~~
- ~~A Permittee's failure to take the appropriate response step when an excursion of a compliance monitoring parameter has occurred is a deviation.~~
- (c) **Emergencies** A deviation caused by an emergency shall be included in the Quarterly Deviation and Compliance Monitoring Report. **(Additional requirements for emergencies are in Section B - Emergency Provisions.)**
- (d) **A deviation required to be reported pursuant to an applicable requirement that exists independent of this permit, shall be reported according to the schedule stated in the applicable requirement and does not need to be included in this report.**

Comment #36

Condition B.16 (Permit Modification, Reopening, Revocation and Reissuance, or Termination)

As written, Condition B.16(a) requires certification of notifications of planned changes or anticipated noncompliance which is not required by statute or rule. Please clarify the last sentence of Condition B.16(a) by inserting after "Permittee" the following: "of a Part 70 permit modification, revocation and reissuance or termination does require the certification by the 'responsible official' as defined by 326 IAC 2-7-1(34). Notifications of planned changes or anticipated noncompliance do not require the certification by the 'responsible official' as defined by 326 IAC 2-7-1(34)."

Response #36

326 IAC 2-7-6(1) states that any document (including reports) required by a Part 70 permit shall contain a certification by a responsible official. Since the requirement to notify IDEM of planned changes or anticipated noncompliance is required by the Part 70 permit, the notifications must be certified. There have been no changes to this condition as a result of this comment.

Comment #37

Condition B.16 (Permit Modification, Reopening, Revocation and Reissuance, or Termination)

Given the above-referenced Settlement Agreement regarding the federal litigation over the final NESHAP rule, the fact that the U.S. EPA will be modifying the NESHAP and that the NESHAP requirements will not become effective until June 14, 2002, the permit should contain a reopener provision for the NESHAP requirements contained herein. Therefore, include the following as Condition B.16(e):

In the event 40 CFR Part 63, Subpart LLL, the National Emission Standards for Hazardous Air Pollutant for the Portland Cement Manufacturing Industry, is modified subsequent to the effective date of this permit, this permit shall be reopened and revised consistent with the revisions made to Subpart LLL in accordance with the procedures set forth in 326 IAC 2-7-9(b) and (c).

Response #37

The suggested reopener provision is not necessary. The Part 70 rules at 326 IAC 2-7-9 require that the

Part 70 permit be reopened and revised if additional applicable requirements become applicable to the source when the remaining permit term is three (3) or more years. Furthermore, if rule changes would make the source subject to fewer or less stringent applicable requirements, Lehigh can apply for a permit modification. There have been no changes to the permit as a result of this comment.

Comment #38

Condition B.17 (Permit Renewal)

Consistent with 326 IAC 2-7-3, replace "except that this protection shall cease to apply if," with "unless" in Condition B.17(c).

Response #38

IDEM believes the condition is clearer using the phrase "except that this protection shall cease to apply if." The current language is consistent with the rule language. There have been no changes to the permit as a result of this comment.

Comment #39

Condition B.19 (Permit Revision Under Economic Incentives and Other Programs)

Delete the space between "326 IAC 2-7-12" and "(b)(2)" in the title to Condition B.19.

Response #39

The requested change has been made. The rule cite in paragraph (b) of the condition has also been corrected as shown below.

- (b) Notwithstanding 326 IAC 2-7-12(b)(1)(D)(i) and 326 IAC 2-7-12(c)(1), minor Part 70 permit modification procedures may be used for Part 70 modifications involving the use of economic incentives, marketable Part 70 permits, emissions trading, and other similar approaches to the extent that such minor Part 70 permit modification procedures are explicitly provided for in the applicable State Implementation Plan (SIP) or in applicable requirements promulgated or approved by the U.S. EPA.

Comment #40

Condition B.20 (Operational Flexibility)

Delete reference to "[326 IAC 2-7-10.5]" in the title of Condition B.20. Delete "Any preconstruction approval required by 326 IAC 2-7-10.5 has been obtained;" in Condition B.20(a)(2) because 326 IAC 2-7-20 does not require same. Furthermore, the changes described in 326 IAC 2-7-20(b), (c) and (e) are not modifications requiring the preconstruction approval under 326 IAC 2-7-10.5. The IDEM cannot introduce new prerequisites to obtain the exemption provided by 326 IAC 2-7-20 without undertaking rulemaking.

Delete "in advance of the change" in the first sentence of Condition B.20(a)(4) since the last phrase of this sentence states "in advance of the proposed change."

Consistent with the last draft permit, the sentence immediately following Condition B.20(b) should be modified as follows: "The notifications required by subsections (a) and (b), which shall be submitted by

the Permittee, do not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34)."

Response #40

Both the state and federal Part 70 rules govern the operation of existing sources. Neither of these rules provide exemptions from the preconstruction requirements of the new source review rules. IDEM agrees that the changes described in 326 IAC 2-7-20(b), (c), and (e) are unlikely to trigger the requirements of preconstruction approval under 326 IAC 2-7-10.5. However, given the complexities of the New Source Review rules at 326 IAC 2-7-10.5 and the PSD rules at 326 IAC 2-2, IDEM prefers to include (a)(2) in the condition to alert the Permittee as to the possible applicability of one of these rules if changes are made at the source.

326 IAC 2-7-6(1) states that any document (including reports) required by a Part 70 permit shall contain a certification by a responsible official. The statement in paragraph (b) of the condition explains that because the notification is not considered a report, it is not required to be certified by the responsible official.

The phrase "in advance of the change" has been deleted from B.20(a)(4) as requested because the first part of the sentence already says "in advance of the change."

Additionally, IDEM has made clarifications to paragraph (b) of the condition.

The changes to B.20(a)(4) and (b) are shown below.

B.20 Operational Flexibility [326 IAC 2-7-20] [326 IAC 2-7-10.5]

(a) The Permittee may make any change or changes at the source that are described in 326 IAC 2-7-20(b), (c), or (e), without a prior permit revision, if each of the following conditions is met:

(4) The Permittee notifies the:

Indiana Department of Environmental Management
Permits Branch, Office of Air Quality
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

and

United States Environmental Protection Agency, Region V
Air and Radiation Division, Regulation Development Branch - Indiana (AR-18J)
77 West Jackson Boulevard
Chicago, Illinois 60604-3590

~~in advance of the change~~ by written notification at least ten (10) days in advance of the proposed change. The Permittee shall attach every such notice to the Permittee's copy of this permit; and

(b) The Permittee may make Section 502(b)(10) of the Clean Air Act changes (this term is defined at 326 IAC 2-7-1(36)) without a permit revision, subject to the constraint of 326 IAC 2-7-20(a). For each such Section 502(b)(10) of the Clean Air Act change, the required written notification shall include the following:

- (1) A brief description of the change within the source;
- (2) The date on which the change will occur;
- (3) Any change in emissions; and
- (4) Any permit term or condition that is no longer applicable as a result of the change.

The notification which shall be submitted is not considered an application form, report, or compliance certification. Therefore, the notifications **required by subsections (a) and (b), which shall be submitted by the Permittee, do** does not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

Comment #41

Condition B. 22 (Inspection and Entry)

Condition B.22(a) should be modified to state: "At reasonable times during normal business hours, enter upon . . ."

Conditions B.22(b), (c) and (d) should be modified to include the phrase "at reasonable times during normal business hours."

Response #41

Neither the rule 326 IAC 2-7-6 nor the Indiana statutes at IC 13-14-2-2 limit inspections to reasonable times during normal business hours. IDEM must maintain the authority to conduct an inspection at night, on weekends, or any time that a complainant or other credible evidence suggests there may be a violation of the permit or federal or state rules. There have been no changes to the permit as a result of this comment.

Comment #42

Condition B.23 (Transfer of Ownership or Operational Control)

Consistent with applicable rules, Condition B.23(b) should state as follows: "Any application requesting an administrative amendment to reflect a change in the ownership or operational . . ."

Response #42

The requested change has been made as shown below.

B.23 Transfer of Ownership or Operational Control [326 IAC 2-7-11]

- (b) Any application requesting **an administrative amendment to reflect** a change in the ownership or operational control of the source shall contain a written agreement containing a specific date for transfer of permit responsibility, coverage and liability between the current and new Permittee. The application shall be submitted to:

Indiana Department of Environmental Management
Permits Branch, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015

Indianapolis, Indiana 46206-6015

The application which shall be submitted by the Permittee does not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

SECTION C - SOURCE OPERATION CONDITIONS

Comment #43

Condition C.2 (Opacity)

Condition C.2 should state that the requirements contained in Conditions C.2(a) and (b) from 326 IAC 5-1, are not federally enforceable. According to the IDEM, the 1998 amendments to these rules have not been approved by the U.S. EPA as revisions to the State Implementation Plan.

Response #43

The 1998 rule revisions to 326 IAC 5-1 were approved into the SIP on July 16, 2002; therefore, Condition C.2 (Opacity) is federally enforceable.

Comment #44

Condition C.3 (Open Burning)

Delete the space between "326 IAC 4-1-3" and "(a)(2)(A)" in the last sentence of Condition C.3.

Response #44

The requested change has been made.

Comment #45

Condition C.7 (Stack Height)

Pursuant to U.S. EPA's approved State Implementation Plans, the last sentence of Condition C.7 should be modified as follows: "The provisions of 326 IAC 1-7-1(3), 326 IAC 1-7-2, 326 IAC 1-7-3(c) and (d), 326 IAC 1-7-4 and 326 IAC 1-7-5(a), (b) and (d) are not federally enforceable."

Response #45

The following parts of the rule are federally enforceable:

326 IAC 1-7-1(3);
326 IAC 1-7-4 (except for (a)(3), (e) and (f)); and
326 IAC 1-7-5(a) and (b).

The condition has been changed as shown below.

C.7 Stack Height [326 IAC 1-7]

The Permittee shall comply with the applicable provisions of 326 IAC 1-7 (Stack Height

Provisions), for all exhaust stacks through which a potential (before controls) of twenty-five (25) tons per year or more of particulate matter or sulfur dioxide is emitted. The provisions of 326 IAC 1-7-2, 326 IAC 1-7-3(c) and (d), 326 IAC 1-7-4~~(d)~~**(a)(3)**, (e), and (f), and 326 IAC 1-7-5(d) are not federally enforceable.

Comment #46

Condition C.9 (Performance Testing)

Please include whether or not the test report required by Condition C.9(c) must include a certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

Response #46

For clarification purposes, a statement has been added to Condition C.9(c) stating that the reports do require a certification by the responsible official. The changes to C.9(c) are shown below.

C.9 Performance Testing [326 IAC 3-6]

- (c) All test reports must be received by IDEM, OAQ not later than forty-five (45) days after the completion of the testing. An extension may be granted by IDEM, OAQ, if the source submits to IDEM, OAQ, a reasonable written explanation not later than five (5) days prior to the end of the initial forty-five (45) day period. **The reports submitted by the Permittee do require certification by the "responsible official" as defined by 326 IAC 2-7-1(34).**

Comment #47

Condition C.11 (Compliance Monitoring)

Because the Title V Permit will not regulate Lehigh's activities until the permit becomes effective, the first sentence of Condition C.11 should reference "within ninety (90) days after the effective date of the permit" not "within ninety (90) days of permit issuance."

The last sentence of Condition C.11 should be modified to state: "Compliance monitoring for new emission units or emission units added through a source modification shall be implemented as required by the applicable statutes, rules and permit conditions." This Title V Permit should not attempt to regulate future approvals.

Response #47

As indicated in the last sentence of Condition C.11, if compliance monitoring for new or modified facilities is not required to begin when operation begins, the approval for the new or modified facility will specifically state when the compliance monitoring requirements are to begin. Therefore, the requested change is not necessary. See also response to comment #26.

Comment #48

Condition C.12 (Maintenance of Emission Monitoring Equipment)

Delete Condition C.12(a) because no federal or state statute or regulation contains the requirements set forth in this condition. The applicable requirements in the regulations that require the continuous

monitoring should be relied on in the event of a breakdown of a continuous monitor. In any event, the first sentence of Condition C.12(a) should be modified to state: "In the event that a breakdown of the emission monitoring equipment not covered by Condition C.13 occurs. . ."

Condition C.12(b) should be restated as follows: "The Permittee shall install, maintain and operate all necessary continuous monitors and related equipment."

Response #48

Condition C.12 (Maintenance of Emission Monitoring Equipment) has been deleted from the permit since this source is not required to operate any continuous emission monitors (CEMs) except for continuous opacity monitors (COMs). The requirements for COMs are included in Section C - Maintenance of Opacity Monitoring Equipment.

Comment #49

Condition C.13 (Maintenance of Opacity Monitoring Equipment)

Delete the provisions contained in Condition C.13 because no federal or state statute or regulation contains the requirements set forth in this condition. The regulations that require the opacity monitoring should be relied on in the event of a breakdown of a continuous opacity monitor. In any event, the monitoring required during a breakdown of a COM should not be more stringent than the NESHAP's accepted monitoring alternative to a COM. 40 CFR § 63.1350(c) and (d) set forth alternative opacity monitoring provisions for certain kilns and clinker coolers which utilize multiple stacks. In lieu of installing, calibrating, maintaining and continuously operating a continuous opacity monitor, daily visual opacity observations of each kiln and/or clinker cooler stack may be performed for at least thirty (30) minutes in accordance with Method 9 of Appendix A of 40 CFR Part 60. Therefore, in the absence of an applicable provision regarding the breakdown of a COM in the regulations that require the opacity monitoring, the alternative monitoring provisions to COMs should be relied on in the event of a COM breakdown. In any event, Condition C.13(a) assumes that the Permittee will always know the reason for the breakdown, which may not be ascertainable.

Response #49

The Permittee is required to install and operate a COM on the kilns and clinker coolers pursuant to 40 CFR 63, Subpart LLL and 326 IAC 3-5. Performing daily Method 9 visible observations of each kiln and/or clinker cooler for thirty (30) minutes would not be sufficient to assure continuous compliance with the opacity limits in the permit. The commenter's proposed level of monitoring would also not be sufficient to comply with the requirements of 326 IAC 3-5 which requires continuous opacity monitoring of the kilns and clinker coolers at all times. In the event of a COM malfunction which lasts four (4) hours or more, the Permittee will need to perform sufficient monitoring to be able to certify continuous compliance with the PM and opacity limits in the permit. The level of monitoring required by this condition is the minimum level of monitoring IDEM believes is necessary for this source to have sufficient information to be able to certify continuous compliance with the PM and opacity limits in the permit when the COM is malfunctioning. IDEM has the authority under 326 IAC 2-7-5(3)(A)(iii) to require sufficient monitoring necessary to assure continuous compliance with the permit limits.

In order to repair the COM, the Permittee will need to ascertain the reason for the COM breakdown. Once that information is ascertained, the Permittee must make a record of the reason for the breakdown.

The condition (now re-numbered C.12) has been changed as shown below.

C.12 Maintenance of Opacity Monitoring Equipment [326 IAC 2-7-5(3)(A)(iii)]

- (a) **The Permittee shall install, calibrate, maintain, and operate all necessary continuous opacity monitoring systems (COMS) and related equipment. In addition, prompt corrective action shall be initiated whenever indicated.**
- (b)(a) In the event that a breakdown of the continuous opacity monitoring system occurs, a record shall be made of the times and reasons of the breakdown and efforts made to correct the problem.
- (c) Whenever a continuous opacity monitor (**COM**) is malfunctioning or will be down for **calibration, maintenance, or repairs or adjustments** for a period of four (4) hours or more, **a calibrated backup COM shall be brought online within four (4) hours of shutdown of the primary COM, if possible. If this is not possible,** visible emission readings shall be performed in accordance with 40 CFR 60, Appendix A, Method 9, for a minimum of one (1) hour, beginning four (4) hours after the start of the malfunction or down time.
- (c) (1) If the reading period begins less than one hour before sunset, readings shall be performed until sunset. If the first required reading period would occur between sunset and sunrise, the first reading shall be performed as soon as there is sufficient daylight.
- (c) (2) Method 9 opacity readings shall be repeated for a minimum of one (1) hour at least once every four (4) hours during daylight operations, until such time that the continuous opacity monitor is back in operation.
- (c) (3) **All of the** The opacity readings during this period shall be reported in the Quarterly **Deviation and Compliance Monitoring Reports**, ~~unless there are ANY observed six minute averaged exceedances, in which case, these shall be reported to the air compliance inspector by telephone, facsimile, or other agreed upon method, within four (4) working hours.~~
- ~~(f) The Permittee shall install, calibrate, quality assure, maintain, and operate all necessary opacity monitors and related equipment. In addition, prompt corrective action shall be initiated whenever indicated.~~
- (d) **Nothing in this permit, shall excuse the Permittee from complying with the requirements to operate a continuous opacity monitoring system pursuant to 326 IAC 3-5 and 40 CFR 63, Subpart LLL.**

Comment #50

Condition C.15 (Pressure Gauge and Other Instrument Specifications)

Condition C.15 should be deleted because this is a new requirement and no authority is cited for the specific provisions contained in this condition of the permit.

Response #50

IDEM believes that monitoring the pressure drop across the baghouses is important for determining the proper operation of the baghouses (see response to comment #63). In order to accurately measure the

pressure drop, adequate pressure drop gauges must be used. The authority for the condition is in 326 IAC 2-1.1-11, 326 IAC 2-7-5(3) and 326 IAC 2-7-6(1) and is cited in the title of the condition.

Comment #51

Condition C.17 (Risk Management Plan)

Include the following to the end of Condition C.17. "At the time of permit issuance, no regulated substances were present at the source in more than a threshold quantity."

Response #51

The Risk Management Plan provision does not state that the Permittee has more than the threshold quantity of a regulated substance. The provision may be applicable if the Permittee does meet the threshold at some time in the future. IDEM, OAQ previously suggested that Lehigh staff submit a written statement certified by the responsible official that this condition is not applicable, so that IDEM, OAQ can remove the condition from the permit. As of this date, Lehigh has made no such submittal. If, at a later date, Lehigh submits such a certified statement, IDEM OAQ will amend the permit appropriately.

IDEM has corrected the rule cite in the title of the condition.

C.16 Risk Management Plan [326 IAC 2-7-5(12)] [40 CFR 68.245 **Subpart G**]

Comment #52

Condition C.18 (Compliance Monitoring Plan - Failure to Take Response Steps)

Delete Condition C.18 because no regulation contains the requirements set forth in this condition.

In any event, Condition C.18(b) should be modified as follows:

- (b) For each compliance monitoring condition of this permit, reasonable response steps shall be taken when indicated by the provisions of that compliance monitoring condition. In accordance with Conditions B.12 and B.15, Permittee's failure to follow response steps may constitute a violation of the permit if the failure to respond causes an exceedance of a permit limit.

Condition C.18(c) should be modified as follows: "Upon investigation of a possible compliance monitoring excursion . . ."

Response #52

See response to comment #35.

Additionally, the IDEM, OAQ has restructured C.18 (now re-numbered C.17) to clarify the contents and implementation of the compliance response plan. The language regarding the OAQ's discretion to excuse failure to perform monitoring under certain conditions has been deleted. The OAQ retains this discretion to excuse minor incidents of missing data; however, it is not necessary to state criteria regarding the exercise of that discretion in the permit.

C.17 Compliance Monitoring ~~Response Plan - Failure to Take Response Steps~~ **Preparation, Implementation, Records, and Reports** [326 IAC 2-7-5][326 IAC 2-7-6]

- (a) ~~The Permittee is required to prepare implement a compliance monitoring plan to ensure that reasonable information is available to evaluate its continuous compliance with applicable requirements. The compliance monitoring plan can be either an entirely new document, consist in whole of information contained in other documents, or consist of a combination of new information and information contained in other documents. If the compliance monitoring plan incorporates by reference information contained in other documents, the Permittee shall identify as part of the compliance monitoring plan the documents in which the information is found. The elements of the compliance monitoring plan are:~~

- ~~_____ (1) This condition;~~
- ~~_____ (2) The Compliance Determination Requirements in Section D of this permit;~~
- ~~_____ (3) The Compliance Monitoring Requirements in Section D of this permit;~~
- ~~_____ (4) The Record Keeping and Reporting Requirements in Section C (General Record Keeping Requirements, and General Reporting Requirements) and in Section D of this permit; and~~
- ~~_____ (5) A a Compliance Response Plan (CRP) for each compliance monitoring condition of this permit. A CRP's shall be submitted to IDEM, upon request and shall be subject to review and approval by IDEM, OAG. The CRP shall be prepared within ninety (90) days after issuance of this permit by the Permittee, supplemented from time to time by the Permittee, and maintained on site, and is comprised of:~~

~~(A)(1)~~ Reasonable response steps that may be implemented in the event that compliance-related information indicates that a response step is needed pursuant to the requirements of Section D of this permit; and **an expected time frame for taking reasonable response steps.**

~~(B)~~ A time schedule for taking reasonable response steps including a schedule for devising additional response steps for situations that may not have been predicted.

(2) If, at any time, the Permittee takes reasonable response steps that are not set forth in the Permittee's current Compliance Response Plan and the Permittee documents such response in accordance with subsection (e) below, the Permittee shall amend its Compliance Response Plan to include such response steps taken.

- (b) For each compliance monitoring condition of this permit, reasonable response steps shall be taken when indicated by the provisions of that compliance monitoring condition **as follows:** Failure to take reasonable response steps may constitute a violation of the permit.

(1) Reasonable response steps shall be taken as set forth in the Permittee's current Compliance Response Plan; or

- (2) **If none of the reasonable response steps listed in the Compliance Response Plan is applicable or responsive to the excursion, the Permittee shall devise and implement additional response steps as expeditiously as practical. Taking such additional response steps shall not be considered a deviation from this permit so long as the Permittee documents such response steps in accordance with this condition.**
 - (3) **If the Permittee determines that additional response steps would necessitate that the emissions unit or control device be shut down, the IDEM, OAQ shall be promptly notified of the expected date of the shut down, the status of the applicable compliance monitoring parameter with respect to normal, and the results of the actions taken up to the time of notification.**
 - (4) **Failure to take reasonable response steps shall constitute a violation of the permit.**
- (c) ~~Upon investigation of a compliance monitoring excursion, the~~ **The Permittee is excused from taking** **not required to take any** further response steps for any of the following reasons:
 - (1) A false reading occurs due to the malfunction of the monitoring equipment **and This shall be an excuse from taking further response steps providing that** prompt action was taken to correct the monitoring equipment.
 - (2) The Permittee has determined that the compliance monitoring parameters established in the permit conditions are technically inappropriate, has previously submitted a request for ~~an administrative amendment~~ **a minor permit modification** to the permit, and such request has not been denied; or
 - (3) An automatic measurement was taken when the process was not operating; or
 - (4) The process has already returned or is returning to operating within "normal" parameters and no response steps are required.
- (d) **When implementing reasonable steps in response to a compliance monitoring condition, if the Permittee determines that an exceedance of an emission limitation has occurred, the Permittee shall report such deviations pursuant to Section B-Deviations from Permit Requirements and Conditions.**
- ~~(d)(e)~~ **(e)** ~~Records shall be kept of all instances in which the compliance related information was not met and of all response steps taken. The Permittee shall record all instances when response steps are taken. In the event of an emergency, the provisions of 326 IAC 2-7-16 (Emergency Provisions) requiring prompt corrective action to mitigate emissions shall prevail.~~
- ~~(e)(f)~~ **(f)** ~~Except as otherwise provided by a rule or provided specifically in Section D, all~~ **Except as otherwise provided by a rule or provided specifically in Section D, all** monitoring ~~as required in Section D shall be performed at all times when the equipment emission unit is operating, except for time necessary to perform quality assurance and maintenance activities. If monitoring is required by Section D and the equipment~~

~~is not operating, then the Permittee may record the fact that the equipment is not operating or perform the required monitoring.~~

- (f) ~~At its discretion, IDEM may excuse the Permittee's failure to perform the monitoring and record keeping as required by Section D, if the Permittee provides adequate justification and documents that such failures do not exceed five percent (5%) of the operating time in any quarter. Temporary, unscheduled unavailability of qualified staff shall be considered a valid reason for failure to perform the monitoring or record keeping requirements in Section D.~~

Comment #53

Condition C.21 (General Record Keeping Requirements)

The requirements contained in Condition C.21(b) are already set forth in Condition C.11, therefore, delete Condition C.21(b).

Response #53

Since the purpose of Condition C.11 is to establish conditions for compliance monitoring and the purpose of Condition C.21 (now C.20) is to establish conditions for record keeping requirements, Condition C.11 has been modified such that it does not reference "record keeping" requirements. The revised condition is shown below.

C.11 Compliance Monitoring [326 IAC 2-7-5(3)] [326 IAC 2-7-6(1)]

Unless otherwise specified in this permit, all monitoring ~~and record keeping~~ requirements not already legally required shall be implemented within ninety (90) days of permit issuance. If required by Section D, the Permittee shall be responsible for installing any necessary equipment and initiating any required monitoring related to that equipment. If due to circumstances beyond its control, that equipment cannot be installed and operated within ninety (90) days, the Permittee may extend the compliance schedule related to the equipment for an additional ninety (90) days provided the Permittee notifies:

Indiana Department of Environmental Management
Compliance Branch, Office of Air Quality
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

in writing, prior to the end of the initial ninety (90) day compliance schedule, with full justification of the reasons for the inability to meet this date.

The notification which shall be submitted by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

Unless otherwise specified in the approval for the new facilities/emission units, compliance monitoring for new facilities/emission units or facilities/emission units added through a source modification shall be implemented when operation begins.

Comment #54

Condition C.22 (Reporting Requirements)

Because the Title V Permit will not regulate Lehigh's activities until the permit becomes effective, Condition C.22(e) should reference the "effective date of the permit" not "the date of issuance."

Response #54

Pursuant to IC 13-15-5-3, the permit becomes effective upon issuance; therefore the effective date of the permit and the issuance date of the permit are the same. By stating that conditions are effective upon issuance, the permit clarifies that the permit becomes effective immediately upon issuance.

Comment #55

Condition C.23 (NESHAP Notification and Reporting Requirements)

Pursuant to 40 CFR Part 63, Subparts A and LLL, the first sentence of Condition C.23 should be modified to state the following: "On and after June 14, 2002, the Permittee shall comply . . ." 40 CFR Part 63, Subpart A applies to owners and operators who are subject to subsequent subparts, and the compliance date for affected sources subject to 40 CFR Part 63, Subpart LLL is June 14, 2002.

Since Lehigh already submitted its Initial NESHAP Notification in accordance with 40 CFR § 63.9(b) and 40 CFR § 63.1353(b)(1), please modify Condition C.23(a) as follows: "Pursuant to 40 CFR § 63.9(b) and 40 CFR § 63.1353(b)(1), the Permittee submitted its Initial NESHAP Notification on October 11, 1999 and provided the following information. . ."

Please include the word "as" before the word "required" in Condition C.23(c).

Response #55

Some of the notification and reporting requirements were required prior to June 14, 2002; therefore, the first sentence will not include "on and after June 14, 2002..." Paragraph (a) has been changed to state that the initial notification has already been submitted. Paragraph (c) has been changed as requested. The changes are shown below. The condition has been renumbered C.22.

C.22 NESHAP Notification and Reporting Requirements [40 CFR Part 63, Subparts A and LLL]

The Permittee shall comply with all reporting provisions specified in 40 CFR Part 63, Subpart LLL, and in particular:

- (a) The Permittee ~~shall~~ **has submitted** an initial notification in accordance with 40 CFR 63.9(b) (Subpart A, General Provisions) ~~immediately on October 11, 1999 to U.S. EPA and IDEM. In 40 CFR 63.9(b), the~~ **The Permittee is required to** provided the following information:
- (c) The Permittee shall submit a notification of opacity and visible emission observations **as** required by 40 CFR 63.1349 in accordance with 40 CFR 63.6(h)(5) and 40 CFR 63.9(f).

SECTIONS D

Comment #56

Please delete the comma after "disposal" in number (5) of the Facility/Emission Unit Description box on page 39.

Response #56

The requested change has been made.

Comment #57

Conditions D.1.1, D.2.2, and D.3.2 (Fugitive Dust Emissions) should be deleted because they contain redundant requirements already required by Condition C.5, Fugitive Dust Emissions. If not completely deleted, delete the comma after "disposal" in the first sentence of D.1.1 and replace "on paved and unpaved roads" with "on paved and unpaved roads owned by the Permittee" because public streets which Lehigh does not have any ownership or control over including Meridian Road, Mill Creek Road, and the Quarry Road (up to the gate entrance to Lehigh's quarry) exist within Lehigh's facility boundaries. These public streets are also used by trucks and other vehicles with no relationship to Lehigh's operations.

Response #57

IDEM agrees that the fugitive dust requirements pursuant to 326 IAC 6-4 do not need to be re-stated in Conditions D.1.1, D.2.2, and D.3.2 since they are already included in Condition C.5. Conditions D.1.1, D.2.2, and D.3.2 have been deleted. All subsequent conditions in these sections have been renumbered appropriately. The conditions which have been removed from the permit are shown below.

~~D.1.1 Fugitive Dust Emissions [326 IAC 6-4]~~

~~The Permittee shall not allow fugitive dust from any of its quarry activities, the CKD storage area (F05), vehicular traffic on paved and unpaved roads, or the truck loadout (F07) to escape beyond the property line or boundaries of the property, right-of-way, or easement on which the source is located, in a manner that would violate 326 IAC 6-4 (Fugitive Dust Emissions). 326 IAC 6-4-2(4) is not federally enforceable.~~

~~D.2.2 Fugitive Dust Emissions [326 IAC 6-4]~~

~~The Permittee shall not allow fugitive dust from the material storage building (F03) and coal pile (F04) to escape beyond the property line or boundaries of the property, right-of-way, or easement on which the source is located, in a manner that would violate 326 IAC 6-4 (Fugitive Dust Emissions). 326 IAC 6-4-2(4) is not federally enforceable.~~

~~D.3.2 Fugitive Dust Emissions [326 IAC 6-4]~~

~~The Permittee shall not allow fugitive dust from the truck loadout (F06) to escape beyond the property line or boundaries of the property, right-of-way, or easement on which the source is located, in a manner that would violate 326 IAC 6-4 (Fugitive Dust Emissions). 326 IAC 6-4-2(4) is not federally enforceable.~~

Comment #58

Condition D.1.2 and D.3.1 (Particulate Matter)

Delete "that shown in the table in 326 IAC 6-3-2 (Process Operations)" from Condition D.1.2(a) and Condition D.3.1, and replace with "the pounds per hour limitation calculated utilizing the above-referenced equation."

Response #58

The requested change has been made in Conditions D.1.2 (renumbered D.1.1) and D.3.1. Changes

reflecting the recent changes to rule 326 IAC 6-3-2 have also been made to these conditions. Condition D.1.1(a) is shown below as an example.

D.1.1 Particulate Matter (PM) [326 IAC 6-3-2]

- (a) Pursuant to 326 IAC 6-3-2 (~~Process Operations~~ **Particulate Emission Limitations for Manufacturing Processes**), the allowable ~~PM~~ **particulate** emission rate from the quarry material sizing facilities/emissions units (EU01 through EU08 and F02) shall not exceed 77.3 pounds per hour (total for all facilities/emission units combined) when operating at a process weight rate of 975 tons per hour.

The pounds per hour limitation was calculated with the following equation:

Interpolation and extrapolation of the data for the process weight rate in excess of 60,000 pounds per hour shall be accomplished by use of the equation:

$$E = 55.0 P^{0.11} - 40 \quad \text{where } E = \text{rate of emission in pounds per hour; and} \\ P = \text{process weight rate in tons per hour}$$

When the process weight rate exceeds 200 tons per hour, the maximum allowable emission may exceed ~~that shown in the table in 326 IAC 6-3-2 (Process Operations)~~ **the pounds per hour limitation calculated using the above referenced equation**, provided the concentration of particulate matter in the discharge gases to the atmosphere is less than 0.10 pounds per one thousand (1,000) pounds of gases.

Comment #59

Condition D.1.3 (Determinations of Nonapplicability)

The last part of Condition D.1.3(a) should be modified as follows: "because they are not affected facilities that were constructed or modified after August 17, 1971." 40 CFR Part 60, Subpart F, only applies to sources that are listed as affected sources in 40 CFR § 60.60(a) that commenced construction or modification after August 17, 1971 in accordance with 40 CFR § 60.60(b).

Response #59

The requested changes have been made as shown below.

D.1.2 Determinations of Nonapplicability [40 CFR 60, Subparts A and F] [40 CFR 63, Subparts A and LLL]

- (a) None of the facilities/emission units listed in this section are subject to the requirements of the New Source Performance Standards (NSPS), 40 CFR 60, Subparts A and F (Standards of Performance for Portland Cement Plants) because they **are not affected facilities that were constructed or modified** prior to the applicability date of August 17, 1971 ~~and have not been modified since the applicability date.~~

Comment #60

Condition D.1.4 (Prevention of Significant Deterioration)

Oct 15, 2001 Comments:

Consistent with 326 IAC 2-2-1(w), the combined PM emissions of the CKD mixer and the CKD truck

loadout shall be less than 25 tons per year. Accordingly, please reword Condition D.1.4(a) as follows: "The combined PM emissions of the CKD mixer (EU24B) and the CKD truck loadout (F07) shall be less than 25 tons per year. Compliance with this limit will be based on a combined short term limit of 5.68 pounds per hour, assuming the source is operating 8760 hours per year."

Consistent with 326 IAC 2-2-1(w), the combined PM10 emissions of the CKD mixer and the CKD truck loadout shall be less than 15 tons per year. Accordingly, please reword Condition D.1.4(b) as follows: "The combined PM10 emissions of the CKD mixer (EU24B) and the CKD truck loadout (F07) shall be less than 15 tons per year. Compliance with this limit will be based on a combined short term limit of 3.40 pounds per hour, assuming the source is operating 8760 hours per year."

Condition D.3.9 (Prevention of Significant Deterioration)

Consistent with 326 IAC 2-2-1(w), the PM emissions from the pan clinker conveyor shall not be more than 25 tons per year. Accordingly, please reword Condition D.3.9(a) as follows: "The PM emissions from the pan clinker conveyor (EU29) shall not be more than 25 tons per year. Compliance with this limit will be based on a short term limit of 5.68 pounds per hour, assuming the source is operating 8760 hours per year." In accordance with 326 IAC 2-2-1(w) please modify the remainder of Condition D.3.9 as follows:

- (b) The combined PM emissions from the packing machine (EU47) and the silo transfer system (EU40A and EU40B) shall not be more than 25 tons per year. Compliance with this limit will be based on a short term combined limit of 5.68 pounds per hour, assuming the source is operating 8760 hours per year.
- (c) The combined PM emissions from the east truck vacuolader (EU42), the west truck loadout bin (EU43) and the west truck vacuolader (EU44) shall not be more than 25 tons per year. Compliance with this limit will be based on a short term combined limit of 5.68 pounds per hour, assuming the source is operating 8760 hours per year.
- (d) The PM emissions from the roll crusher (EU31) shall not be more than 25 tons per year. Compliance with this limit will be based on a short term limit of 5.68 pounds per hour, assuming the source is operating 8760 hours per year.

Lehigh has noted on page 26 of the Technical Support Document that the roll crusher (EU31) has been grouped with the articuloader (EU46) and the railroad loadout bin (EU45). The roll crusher is used to grind clinker prior to the finish mill and is not directly related to the articuloader and the railroad loadout bin.

- (e) The combined PM emissions from the articuloader (EU46) and the railroad loadout bin (EU45) shall not be more than 25 tons per year. Compliance with this limit will be based on a short term combined limit of 5.68 pounds per hour, assuming the source is operating 8760 hours per year.
- (f) The PM emissions from the finish mill #4 separator (EU36) shall not be more than 25 tons per year. Compliance with this limit will be based on a short term limit of 5.68 pounds per hour, assuming the source is operating 8760 hours per year.
- (g) The PM10 emissions from the finish mill #4 separator (EU36) shall not be more than 15 tons per year. Compliance with this limit will be based on a short term limit of 3.40 pounds per hour, assuming the source is operating 8760 hours per year.

- (h) The PM emissions from the lime bin (EU38) shall not be more than 25 tons per year. Compliance with this limit will be based on a short term limit of 5.68 pounds per hour, assuming the source is operating 8760 hours per year.
- (i) The PM10 emissions from the lime bin (EU38) shall not be more than 15 tons per year. Compliance with this limit will be based on a short term limit of 3.40 pounds per hour, assuming the source is operating 8760 hours per year.
- (j) The combined PM emissions from the CKD mixer (EU24B) and the truck loadout (F07) shall not be more than 25 tons per year. Compliance with this limit will be based on a short term combined limit of 5.68 pounds per hour, assuming the source is operating 8760 hours per year.

On Sept 17, 2002, Lehigh submitted additional comments as follows:

The east truck vaculoader, the west truck vaculoader, and the west truck loadout bin were constructed in 1959, not 1985. The railroad loadout bin (EU45) and the articuloader (EU46) were constructed in 1959, not 1987. The silo transfer system (EU40A and EU40B) were constructed in 1959, not 1984. Therefore, no limits are necessary to render PSD not applicable to these units.

Response #60

EPA, in their 1989 "Limiting Potential to Emit in New Source Permitting" memo² stated that limits established for the purpose of rendering PSD not applicable must be enforceable as a practical matter. An annual emission limit is not enforceable as a practical matter. A short term emission limit is necessary. An hourly emission limit allows the source to demonstrate compliance through the applicable test method. These same procedures for limiting PTE are reiterated in EPA's New Source Review Workshop Manual³ (NSR Manual).

The PM limits have been adjusted to allow total PM emissions from each modification up to 24.9 tons per year instead of 24 tons per year. The PM10 limits have been adjusted to allow total PM emissions from each modification up to 14.9 tons per year instead of 14 tons per year.

² See EPA Air Enforcement Division, Office of Enforcement and Compliance Monitoring memorandum "Limiting Potential to Emit in New Source Permitting," June 13, 1989.

³ See EPA's New Source Review Workshop Manual, October 1990, page A.5.

1987 Modification

Facility	PTE		Limits necessary to render PSD not applicable	
	PM		PM	
	(lbs/hr)	(tons/yr)	(lbs/hr)	(tons/yr)
roll crusher (EU31)	1.89	8.28	3.71 5.68	16.25 24.9
articulader (EU46)	0.21	0.92	0.41	1.80
railroad loadout bin (EU45)	0.69	3.02	1.36	5.95
Total	2.79	12.22	5.48 5.68	24 24.9

Since the dates of construction of the east and west vaculoaders, the west truck loadout bin, the articulader, the railroad loadout bin, and the silo transfer system are 1959, which is prior to the applicability of the PSD rules, the limits established to render PSD not applicable to these units have been removed from the permit.

1984 Modification

Facility	PTE after controls		Limits necessary to render PSD not applicable	
	PM		PM	
	(lbs/hr)	(tons/yr)	(lbs/hr)	(tons/yr)
packing machine (EU47)	1.79	7.83	3.39 5.68	14.85 24.9
silo transfer system (EU40A and EU40B)	1.10	4.82	2.09	9.15
Total	2.89	12.65	5.48 5.68	24.9

1985 Modification

Facility	PTE after controls		Limits necessary to render PSD not applicable	
	PM		PM	
	(lbs/hr)	(tons/yr)	(lbs/hr)	(tons/yr)
east truck vaculoder (EU42)	0.42	1.84	1.827	8
west truck loadout bin (EU43)	0.42	1.84	1.827	8
west truck vaculoder (EU44)	0.42	1.84	1.827	8
Total	1.26	5.52	5.48	24

Changes to the conditions are shown below. The conditions have been renumbered as D.1.3 and D.3.6.

D.1.3 Prevention of Significant Deterioration (PSD) [326 IAC 2-2]

Pursuant to minor source modification 093-11313 issued November 9, 1999, and in order to render the requirements of PSD not applicable, the following conditions shall apply:

- (a) The combined PM emissions from the CKD mixer (EU24B), **the CKD disposal and mining facilities (F05)**, and the truck loadout (F07) shall not exceed ~~5.48~~ **5.68** pounds per hour.
- (b) The combined PM10 emissions from the CKD mixer (EU24B), **the CKD disposal and mining facilities (F05)**, and the truck loadout (F07) shall not exceed ~~3.20~~ **3.40** pounds per hour.

Therefore, the requirements of 326 IAC 2-2 (PSD) and 40 CFR 52.21 are not applicable.

D.3.6 Prevention of Significant Deterioration (PSD) [326 IAC 2-2]

In order to render the requirements of PSD not applicable, the following conditions shall apply:

- (a) The PM emissions from the baghouse FDC5 controlling the pan clinker conveyor (EU29) shall not exceed ~~5.48~~ **5.68** pounds per hour.
- (b) The PM emissions from the baghouses SDC11 and SDC 12 controlling the packing machine (EU47) shall not exceed ~~3.39~~ **5.68** pounds per hour.
- ~~_____ (c) The PM emissions from the baghouses SDC3 and SDC4 controlling the silo transfer system (EU40A and EU40B) shall not exceed 2.09 2.17 pounds per hour.~~
- ~~_____ (d) The PM emissions from the baghouse SDC6 controlling the east truck vacuolader (EU42) shall not exceed 1.827 pounds per hour.~~
- ~~_____ (e) The PM emissions from the baghouse SDC7 controlling the west truck vacuolader (EU43) shall not exceed 1.827 pounds per hour.~~
- ~~_____ (f) The PM emissions from the baghouse SDC8 controlling the west truck vacuolader (EU44) shall not exceed 1.827 pounds per hour.~~
- (g) (c) The PM emissions from the baghouse FDC7 controlling the roll crusher (EU31) shall not exceed ~~3.74~~ **5.68** pounds per hour.
- (h) ~~The PM emissions from the baghouse SDC10 controlling the articuloader (EU46) shall not exceed 0.41 pounds per hour.~~
- (i) ~~The PM emissions from the baghouse SDC9 controlling the railroad loadout bin (EU45) shall not exceed 1.36 pounds per hour.~~
- (j) (d) The PM emissions from the baghouse FDC12 controlling the finish mill #4 separator (EU36) shall not exceed ~~5.48~~ **5.68** pounds per hour.
- (k) (e) The PM10 emissions from the baghouse FDC12 controlling the finish mill #4 separator (EU36) shall not exceed ~~3.20~~ **3.40** pounds per hour.

~~(f)~~ (f) The PM emissions from the baghouse FDC14 controlling the lime bin (EU38) shall not exceed ~~5.48~~ **5.68** pounds per hour.

~~(m)~~ (g) The PM10 emissions from the baghouse FDC14 controlling the lime bin (EU38) shall not exceed ~~3.20~~ **3.40** pounds per hour.

Therefore, the requirements of 326 IAC 2-2 (PSD) and 40 CFR 52.21 are not applicable.

Comment #61

Conditions D.1.7, D.2.13, D.3.14 (Visible Emission Notations)

These conditions should be deleted because the IDEM has not cited any authority for their inclusion in the permit. Although 40 CFR § 70.6(a)(3)(A) requires all monitoring and analysis procedures or test methods under 40 CFR Part 64 to be included as monitoring requirements in Title V permits, 40 CFR § 64.2(b)(i) exempts emission limitations or standards proposed by the Administrator of the U.S. EPA after November 15, 2000 pursuant to Section 111 or 112 of the Clean Air Act from the requirements of Part 64 (this would include the NESHAP for the Portland Cement Manufacturing Industry). As such, compliance with the NESHAP satisfies Enhanced Monitoring requirements. Additionally, pursuant to the IDEM's Compliance Monitoring Guidance and the EPA's Periodic Monitoring Guidance (see p. 15 and p. 5 respectively), the NESHAP monitoring requirements satisfy federal periodic monitoring requirements as well as Indiana's compliance monitoring requirements. Although the PM and Opacity limits contained in the NESHAP do not apply to the quarry material sizing facilities, EU09, and EU10, 326 IAC 6-3 and 5-1 do apply, and the limits contained therein are not as strict as the PM and Opacity limits contained in the NESHAP.

Therefore, the monitoring required pursuant to the NESHAP to assure compliance with the more strict limitations contained in the NESHAP should be sufficient to assure compliance with Indiana's less stringent limits. Furthermore, the potential to emit for the quarry material sizing facilities/emission units, based on AP-42 emission factors, falls below the process weight rate emission limitations; thus, compliance monitoring requirements on a shift basis as currently stated in the Draft Permit is excessive.

Condition D.1.7 should be restated as follows:

D.1.7 - Visible Emissions Tests

A monthly one-minute visible emissions test shall be conducted on each stack exhaust (S-QDC2 through S-QDC8, S-KDC7, S-KDC7A and S-KDC7B) associated with the quarry material sizing facilities/emission units (EU01 through EU08) and the cement kiln dust storage and handling facilities/emission units (EU24, EU24A and EU24B), in accordance with Method 22 of Appendix A to 40 CFR Part 60. The test must be conducted while the source is in operation.

If no visible emissions are observed in six consecutive monthly tests the Permittee may decrease the frequency of testing from monthly to semi-annually for that specific stack or emission unit. If visible emissions are observed during any semi-annual test, the Permittee must resume testing of that stack or emission unit on a monthly basis and maintain that schedule until no visible emissions are observed in six consecutive monthly tests.

If no visible emissions are observed during the semi-annual test for a stack or emission unit, the Permittee may decrease the frequency of testing from semi-annually to annually for that stack or emission unit. If visible emissions are observed during any annual test, the Permittee must resume

testing of that stack or emission unit on a monthly basis and maintain that schedule until no visible emissions are observed in six consecutive monthly tests, in which case the test frequency may be reduced as described above.

If visible emissions are observed during any Method 22 test, the Permittee must conduct a 6-minute test of opacity in accordance with Method 9 of 40 CFR Part 60, Appendix A. The Method 9 test must begin within one hour of any observation of visible emissions.

This Condition is not federally enforceable.

Similar changes must be made to Conditions D.2.13 and D.3.14.

See the Settlement Agreement referenced in the General Comments. Please be advised that pursuant to Section D(2)(a) of the Settlement Agreement, the U.S. EPA has agreed to revise 40 CFR § 63.1350(e)(2) which sets forth monitoring requirements for the raw and finish mills as follows: "Within 24 hours of the end of the Method 22 test in which visible emissions were observed, conduct a follow up Method 22 test of each stack from which visible emissions were observed during the previous Method 22 test. If visible emissions were observed during the previous Method 22 test, conduct a visual opacity test of each stack from which emissions were observed during the follow up Method 22 test in accordance with Method 9 of Appendix A of 40 C.F.R. Part 60. The duration of the Method 9 test shall be thirty minutes."

Response #61

Compliance monitoring conditions such as these requirements to perform visible emission notations, are required in order to demonstrate continuous compliance with the permit requirements. Visible emission notations are used to indicate compliance with 326 IAC 5-1 and the particulate matter and opacity limits pursuant to 40 CFR 63, Subpart LLL and 326 IAC 6-3-2. Since bag failure can occur suddenly and without warning, possibly causing a violation of 326 IAC 5-1, 326 IAC 6-3-2, or 40 CFR 63, Subpart LLL, the OAQ does not believe that monthly notations would be sufficient for the Permittee to certify continuous compliance.

Further, while the nature of a facility's operation may not vary from shift to shift, the personnel at the facility does change from shift to shift. The OAQ believes that all shifts should be in tune with the work practices necessary to ensure continual compliance with permit requirements. These work practices should include an understanding and awareness of plant emissions during normal operations. This knowledge and awareness during all shifts can minimize lag time in addressing control failure.

Indiana's Title V rules concerning compliance monitoring are somewhat different than the corresponding federal counterpart. The provisions of 326 IAC 2-7-5(3) state that the Part 70 permits must include: "Monitoring and related record-keeping and reporting requirements which assure that all reasonable information is provided to evaluate continuous compliance with the applicable requirements." Additionally, the language of 326 IAC 2-7-5(3) clearly suggests that existing federal monitoring requirements are considered only as "minimum" permit requirements. Additionally, since 326 IAC 2-7-5 is federally enforceable, the monitoring conditions required pursuant to 326 IAC 2-7-5 are also federally enforceable. The rule cites are included in the titles of the individual sections of the permit. See "Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]" just prior to Condition D.1.7 (now renumbered D.1.6).

The settlement agreement does not constitute a final rule change. The permit must include the requirements of the current version of the rule.

There have been no changes to these conditions as a result of these comments.

Comment #62

Conditions D.1.7, D.2.13, D.3.14 (Visible Emission Notations)

There is no need to repeat the same language in Conditions D.1.7(c) and (d), therefore, delete the last sentence of Condition D.1.7(c).

In any event the last sentence of Condition D.1.7(d) and/or D.1.7(c) should be amended as follows: "In accordance with Conditions B.12 and B.15, Permittee's failure to follow response steps may constitute a violation of the permit if the failure to respond causes an exceedance of a permit limit." These same changes should be made to Conditions D.2.13 and D.3.14.

Response #62

Failure to take any response steps after observing abnormal visible emissions is considered a violation of the permit. Abnormal visible emissions can indicate a process upset or a malfunction of the control device. Either of these situations could cause an exceedance of a particulate matter limitation or an exceedance of an opacity limit. Unless a certified opacity reader was on site and available to perform a Method 9 test, the Permittee could not affirm that the abnormal visible emissions were not actually causing a violation of the opacity limit. Further, without performing a stack test, the Permittee could not affirm that the abnormal visible emissions were not indicating a violation of the particulate matter limits in the permit. It is unlikely that the Permittee would be able to perform either Method 9 opacity readings, or a particulate matter stack test immediately upon observing abnormal emissions from a stack. Without taking any response steps or doing any stack tests, the only information available regarding emissions would be that the emissions appear to be "abnormal." Without any other evidence to the contrary, the abnormal visible emissions would be credible evidence that the emissions from the stack could be in violation of the particulate matter and opacity limits in the permit. For these reasons, the Permittee is required to take response steps whenever abnormal visible emissions are observed and the failure to take any response steps in accordance with the CRP will be considered a violation of the permit.

IDEM has corrected the condition so that the same statement does not appear twice. The revised condition (now renumbered D.1.6) is shown below.

D.1.6 Visible Emissions Notations

Visible emission notations of all of the baghouse stack exhausts shall be performed once per shift during normal daylight operations. A trained employee shall record whether emissions are normal or abnormal.

- (a) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.
- (b) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.
- (c) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process. ~~Failure to take response steps in accordance with Section C- Compliance Monitoring Plan - Failure to Take Response Steps, shall be considered a~~

~~violation of this permit.~~

- (d) The Compliance Response Plan for these units shall contain troubleshooting contingency and response steps for when an abnormal emission is observed or when visible emissions are observed crossing the property line. Failure to take response steps in accordance with Section C - Compliance ~~Monitoring~~ **Response Plan --Failure to Take Response Steps Preparation, Implementation, Records, and Reports**, shall be considered a violation of this permit.

Comment #63

Condition D.1.8 (Parametric Monitoring)

Delete Condition D.1.8 because the IDEM does not cite any authority for the requirements contained in this condition. Lehigh disagrees with the need for daily static pressure drop readings to show compliance with the applicable rules of this section. The NESHAP does not require parametric monitoring. In any event, this condition in previous drafts required that Lehigh record total static pressure drops only once per day, not once per shift. No authority or rationale is provided for increasing the frequency to once per shift.

In any event, the last sentence in the first paragraph of Condition D.1.8 should be amended as follows:
"In accordance with Conditions B.12 and B.15, Permittee's failure to follow response steps may constitute a violation of the permit if the failure to respond causes an exceedance of a permit limit."

These comments also apply to Conditions D.2.14, D.3.15, and D.5.13. In addition to the above comments, Lehigh points out that the clinker coolers in Section D.5 of the permit are required to operate COMs; therefore, continuous information will be available as to the compliance of the emission units.

Response #63

The requirements to monitor the pressure drop across the baghouses and also observe visible emissions from the stacks are not duplicative monitoring. Visible emission notations are used to indicate compliance with the opacity and particulate matter limits, while monitoring of the pressure drop of the baghouses provides an indication of whether the control device is operating properly. Since particulate limits for some of these units are very low, an observation that visible emissions are "normal" would not necessarily indicate compliance with the particulate limit, especially in the case where the control device might be operating at less than peak levels (which could be indicated by monitoring the pressure drop). Monitoring of the static pressure drop can alert the operator to relative changes (such as dust cake resistance) over a period of time. The operator can use this information to chart trends and determine if the unit is operating within the optimal range as determined by baseline testing of the unit and manufacturer's specifications. Pressure drop is an indicator of a variety of conditions within the baghouse. Any deviations from the normal operational range of the unit, whether gradual or sudden, should alert the operator that the unit needs maintenance. The Compliance Response Plan should include response steps to anticipate corrective actions when abnormal conditions arise. Both gradual and sudden changes in the pressure drop could result in damage to the bags if not properly addressed. Further, while the nature of a facility's operation may not vary from shift to shift, the personnel at the facility does change from shift to shift. The OAQ believes that all shifts should be in tune with the work practices necessary to ensure continual compliance with permit requirements. These work practices should include an understanding and awareness of proper operating parameters of the control equipment. This knowledge and awareness during all shifts can minimize lag time in addressing control failure. Therefore, the OAQ believes that pressure drop readings should be taken at least once per shift, in addition to the visible emission observations. The requirements to measure the pressure drops

across the baghouses will not be deleted from the permit.

Failure to take any response steps after observing a pressure drop that is outside the normal range is considered a violation of the permit. An abnormal pressure drop can indicate a pending or current malfunction of the control device, which could cause an exceedance of a particulate matter limitation or an exceedance of an opacity limit. Without taking any response steps or doing any stack tests, the only information available regarding emissions would be that the pressure drop of the baghouse was outside the normal operating range. Without any other evidence to the contrary, the out of range pressure drop would be credible evidence that the control device was not functioning properly and emissions from the stack could be in violation of the particulate matter and opacity limits in the permit. For these reasons, the Permittee is required to take response steps whenever the pressure drop is outside the normal range, and the failure to take any response steps in accordance with the CRP will be considered a violation of the permit.

The conditions requiring parametric monitoring have been revised to clarify that an out of range pressure drop reading is not a deviation from the permit. Revised Condition D.1.8 (now renumbered D.1.7) is shown below as an example.

D.1.7 Parametric Monitoring

The Permittee shall record the total static pressure drop across each baghouse listed in this section, at least once per shift when the associated facility/emissions unit is in operation. ~~Unless operated under conditions for which the Compliance Response Plan specifies otherwise~~ **When for any one reading, the pressure drop across each baghouse shall be maintained within is outside the normal range of 1.0 and 8.0 inches of water or a range established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports.** The Compliance Response Plan for these units shall contain troubleshooting contingency and response steps for when the pressure reading is outside of the above mentioned range for any one reading. **A pressure reading that is outside the above mentioned range is not a deviation from this permit.** Failure to take response steps in accordance with Section C - Compliance Monitoring ~~Response Plan - Failure to Take Response Steps~~ **Preparation, Implementation, Records, and Reports**, shall be considered a violation of this permit.

The instrument used for determining the pressure shall comply with Section C - Pressure Gauge and Other Instrument Specifications, of this permit, shall be subject to approval by IDEM, OAQ, and shall be calibrated at least once every six (6) months.

Comment #64

Condition D.1.9 (Baghouse Inspections)

Delete Condition D.1.9 because the IDEM does not cite any authority for the requirements contained in this condition. Pursuant to Conditions B.11 and D.1.5, Lehigh must prepare and maintain a Preventative Maintenance Plan which includes a "description of the items or conditions that will be inspected and the inspection schedule for said items or conditions." Therefore, specific PMP items and/or schedules need not be included in the permit.

This comment also applies to Conditions D.2.15, D.3.16, and D.5.14.

Response #64

326 IAC 2-7-5(1) and 326 IAC 2-7-6(1) provide IDEM the authority to require compliance monitoring conditions as necessary to assure continuous compliance with the emission limits. These rule cites are included as part of the title of the compliance monitoring section of the permit. The baghouses must operate properly in order for these processes to achieve compliance; therefore, IDEM believes it is reasonable and necessary to require the source to inspect the baghouses periodically. There has been no change to the permit as a result of this comment.

Comment #65

Condition D.1.10 (Broken or Failed Bag Detection)

Delete Condition D.1.10 because the IDEM does not cite any authority for the requirements contained in this condition. Moreover, Condition B.12, Emergency Provisions, specifies the responses to be implemented in the event of a broken or defective bag.

In any event, the second sentence of Condition D.1.10(a) should be amended to include "from the baghouse exhaust stack" after "no visible emissions."

In any event, delete the fourth sentence of Condition D.1.10(a) which requires that response steps be devised if response steps are not already included in the Compliance Response Plan, within eight (8) business hours of discovery of the baghouse failure because this requirement is inconsistent with Condition C.18(a)(5). Condition C.18(a)(5) states that the Compliance Response Plan shall be comprised of a time schedule for taking reasonable response steps including a schedule for devising additional response steps for situations that may not have been predicted.

In any event, the last sentence of Condition D.1.10(a) should be amended as follows: "In accordance with Conditions B.12 and B.15, Permittee's failure to follow response steps may constitute a violation of the permit if the failure to respond causes an exceedance of a permit limit."

These comments also apply to Conditions D.2.16, D.3.17, and D.5.15.

Response #65

326 IAC 2-7-5(1) and 326 IAC 2-7-6(1) provide IDEM the authority to require compliance monitoring conditions as necessary to assure continuous compliance with the emission limits. These rule cites are included as part of the title of the compliance monitoring section of the permit. Since not every broken or failed bag is the result of an emergency, Condition B.12 (Emergency Provisions) does not specify the responses to be implemented in all situations where the Permittee might observe a broken or failed bag. Paragraph (a) of the condition already refers the Permittee to Condition B.12 (Emergency Provisions) for situations where the broken or failed bag is the result of an emergency.

The second sentence of the condition (now renumbered D.1.9) has been modified to clarify that the reference to visible emissions is meant to apply to the emission unit, control device, and stack where the bag failure occurred. The revised condition is shown below.

The fourth sentence of paragraph (a) of the condition is not inconsistent with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports. The condition in section C generally refers to any response steps needed pursuant to any of the requirements of Section D. Condition D.1.10 (now renumbered D.1.9) specifies exactly what timeframe is required when bag failure occurs. This requirement is to assure that when bag failure occurs, the response time is short.

See also response to comment #62.

Revised Condition D.1.10 (now renumbered D.1.9) is shown below as an example.

D.1.9 Broken or Failed Bag Detection

In the event that bag failure has been observed.

- (a) For multi-compartment units, the affected compartments will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if there are no visible emissions **from the emission unit, control device, or stack**, or if the event qualifies as an emergency and the Permittee satisfies the emergency provisions of this permit (Section B- Emergency Provisions). Within eight (8) business hours of the determination of failure, response steps according to the timetable described in the Compliance Response Plan shall be initiated. For any failure with corresponding response steps and timetable not described in the Compliance Response Plan, response steps shall be devised within eight (8) business hours of discovery of the failure and shall include a timetable for completion. Failure to take response steps in accordance with Section C - Compliance ~~Monitoring~~ **Response Plan - Failure to Take Response Steps Preparation, Implementation, Records, and Reports**, shall be considered a violation of this permit.
- (b) For single compartment baghouses, failed units and the associated process will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).

Comment #66

Conditions D.2.3, D.3.6, D.4.5, and D.5.5 (General Provisions Relating to NESHAP)

Pursuant to 40 CFR Part 63, Subparts A and LLL, the first sentence of these conditions should be modified to state as follows: "On and after June 14, 2002, the provisions of 40 CFR Part 63, Subpart A - General Provisions, which are incorporated by reference in 326 IAC 20-1, shall apply . . ." 40 CFR Part 63, Subpart A applies to owners and operators who are subject to subsequent subparts of 40 CFR Part 63, and the compliance date for affected sources subject to 40 CFR Part 63, Subpart LLL is June 14, 2002.

Please include the following to the end of paragraph (b) of these conditions: "Notwithstanding the foregoing, the Permittee retains the right to seek administrative review and a stay of effectiveness of any SSM modifications."

Additionally, Condition D.3.6, should not reference conveyor transfer points with respect to the roll crusher (EU31).

Response #66

The conditions have been modified to include the compliance date for the rule. All the language in these conditions, except for the first paragraph, has been deleted. IDEM believes the permit may be confusing if only some of the requirements of 40 CFR 63, Subpart A are included in the conditions. It would not be practical to include all of the requirements of 40 CFR 63, Subpart A since the text would be lengthy.

Since the requirements of 40 CFR 63, Subpart A are relatively straightforward and there are a limited number of compliance options, IDEM has decided not to include any of the detailed requirements of 40 CFR 63, Subpart A in the permit. The revised condition D.2.3 (now renumbered D.2.2) is shown below as an example.

D.2.2 General Provisions Relating to NESHAP [326 IAC 20-1][40 CFR Part 63, Subpart A]

On and after June 14, 2002, the The provisions of 40 CFR Part 63, Subpart A - General Provisions, which are incorporated by reference in 326 IAC 20-1, apply to the material storage building (F03), and the raw mills (EU11, EU11A, EU12 and EU12A) described in this section except when otherwise specified in 40 CFR Part 63, Subpart LLL. ~~This includes but is not limited to the following requirements:~~

- ~~Pursuant to 40 CFR 63, the Permittee shall develop and implement a written startup, shutdown, and malfunction (SSM) plan that describes, in detail, procedures for operating and maintaining the source during periods of startup, shutdown, and malfunction and a program of corrective action for malfunctioning process and air pollution control equipment used to comply with 40 CFR 63, Subpart LLL. As required under 40 CFR 63.8(c)(1)(i) (General Provisions), the plan shall identify all routine or otherwise predictable continuous monitoring system (CMS) malfunctions. The plan shall be incorporated by reference into the source's Part 70 permit.~~
- ~~(a) During periods of startup, shutdown, and malfunction, the Permittee shall operate and maintain each facility (including associated air pollution control equipment) in accordance with the procedures specified in the SSM plan developed under this condition.~~
- ~~(b) The Permittee shall keep the written SSM plan on record after it is developed to be made available for inspection, upon request, by IDEM, OAQ for the life of the facility or until the facility is no longer subject to this rule. In addition, if the SSM plan is revised, the Permittee shall keep previous (i.e., superseded) versions of the SSM plan on record, to be made available for inspection, upon request, by IDEM, OAQ, for a period of 5 years after each revision to the plan. Revisions to the SSM plan are automatically incorporated by reference and do not require a permit revision.~~
- ~~(c) If the SSM plan fails to address or inadequately addresses an event that meets the characteristics of a malfunction but was not included in the SSM plan at the time the Permittee developed the plan, the Permittee shall revise the SSM plan within forty-five (45) days after the event to include detailed procedures for operating and maintaining the facility during similar malfunction events and a program of corrective action for similar malfunctions of process or air pollution control equipment.~~

Condition D.3.6 (now re-numbered D.3.3) has also been revised to correct the references to the roll crusher.

D.3.3 General Provisions Relating to NESHAP [326 IAC 20-1][40 CFR Part 63, Subpart A]

On and after June 14, 2002, the The provisions of 40 CFR Part 63, Subpart A - General Provisions, which are incorporated by reference in 326 IAC 20-1, apply to the raw mill storage facilities/emissions units (EU13, EU14, EU18, EU20 and EU22), the conveyor transfer points associated with the clinker handling facilities/emission units (EU25, EU26a, EU26b, EU27, **and EU29**) ~~and the roll crusher (EU31)~~, the finish mill facilities/emission units (EU32 through EU36 and EU38), and the finish material storage and bulk loading and packaging facilities/emission units (EU37, EU39 through EU47, and F06) described in this section except when otherwise specified in 40 CFR Part ~~60~~ **63**, Subpart LLL. ~~This includes but is not limited to the following~~

requirements:

Comment #67

Condition D.2.4 (NESHAP Emission Limitations)

To clarify that emissions from each of the affected facilities listed in Condition D.2.4 individually shall not exceed ten percent (10%) opacity, Condition D.2.4 should be amended to include "each" after "the visible emissions from."

Pursuant to 326 IAC 5-1-1(a), add the following to the end of this condition: "On and after June 14, 2002, 326 IAC 5-1-2 shall not apply to the facilities/emission units listed in this condition." 326 IAC 5-1-2 does not apply to facilities/emission units if an opacity limitation has been established by a NSPS or a Part 70 Permit. This comment also applies to Condition D.3.7, D.4.6, and D.5.6.

Response #67

IDEM agrees. The requested changes have been made. The revised condition D.2.4 (now renumbered D.2.3) is shown below as an example.

D.2.3 NESHAP Emissions Limitation [40 CFR 63, Subpart LLL]

Pursuant to 40 CFR 63.1348 (Emissions Standards and Operating Limits), on and after ~~June 10~~ **June 14**, 2002, which is the compliance date for the National Emission Standards for Hazardous Air Pollutants (NESHAP) for the Portland Cement Manufacturing Industry, the visible emissions from the material storage building (F03) and each of the raw mills (EU11, EU11A, EU12 and EU12A) shall **each** not exceed ten percent (10%) opacity. **On and after June 14, 2002, 326 IAC 5-1-2 shall not apply to the facilities/emission units subject to the opacity limit in this condition.**

Comment #68

Condition D.2.5 (Sulfur Dioxide)

In Condition D.2.5(a), delete "Pursuant to 326 IAC 7-2-1, compliance shall be demonstrated on a 30-day rolling weighted average." 326 IAC 7-2-1 only requires fuel combustion sources with total coal-fired heat input capacity greater than or equal to 1500 million Btus per hour to submit quarterly reports of the 30-day weighted rolling average. This comment also applies to Condition D.4.2.

To clarify the requirements for the natural gas-fired burners, modify the last sentence of Condition D.2.5(b) as follows: ". . . shall not apply to the natural gas-fired burners."

Condition D.2.17 (Record Keeping Requirements)

Additionally, Condition D.2.17(a) should be modified as follows:

To document compliance with Conditions D.2.5(a) and D.2.10, the Permittee shall maintain records in accordance with (1) through (4) below. Records maintained for (1) through (4) shall be complete and sufficient to establish compliance with the SO₂ emission limits established in D.2.5(a).

- (1) Calendar dates covered in the compliance determination period
- (2) Total monthly coal consumption;
- (3) Calendar month average coal sulfur content and coal heat content;

- (4) Calendar month average sulfur dioxide emission rate in pounds per million Btus.

This comment also applies to Condition D.4.19.

Condition D.2.18 (Reporting Requirements)

Condition D.2.18(c) requires that the Permittee utilize the Part 70 Quarterly Report For Use When Combusting Coal Form attached to the Draft Permit to demonstrate compliance with Condition D.2.5. However, consistent with Lehigh's comment to Condition D.2.5, Lehigh is not required to demonstrate compliance with its SO₂ emissions on a thirty (30) day rolling weighted average. Therefore, the Part 70 Quarterly Report For Use When Combusting Coal Form attached to the Draft Permit which requires reporting of the thirty (30) day rolling weighted average, should be replaced with a form similar to that previously proposed to Lehigh which contained fields for the following parameters: Month; Monthly Average Coal Sulfur Content; Monthly Average Coal Heat Content; Coal Consumption; and Equivalent Sulfur Dioxide Emissions. This comment also applies to Condition D.4.20.

Response #68

IDEM agrees. Condition D.2.5 (now renumbered D.2.4) has been changed as shown below.

D.2.4 Sulfur Dioxide (SO₂) [326 IAC 7-1.1] [326 IAC 7-2-1]

The raw mills (EU11 and EU12) can be fired by either the coal-fired stoker or the natural gas burners. The limit in (a) applies only when the using the coal-fired stoker.

- (a) Pursuant to 326 IAC 7-1.1 (Sulfur Dioxide Emission Limitations), the SO₂ emissions from the combustion of coal in the coal-fired stoker shall not exceed six (6.0) pounds per million Btu heat input. Pursuant to 326 IAC 7-2-1, compliance shall be demonstrated on a ~~30-day rolling weighted~~ **calendar month** average. 326 IAC 7-1.1 and 326 IAC 7-2-1 are not federally enforceable.
- (b) Pursuant to minor source modification 093-10597 issued March 1, 1999, the two (2) natural gas-fired burners (EU11A and EU12A) shall combust only natural gas. Therefore, the requirements of 326 IAC 7-1.1 (Sulfur Dioxide Emission Limitations) will not apply **to the natural gas-fired burners (EU11A and EU12A).**

Condition D.4.2 (now renumbered D.4.1) has been changed as shown below.

D.4.1 Sulfur Dioxide (SO₂) [326 IAC 7-1.1-1] [326 IAC 7-2-1]

Pursuant to 326 IAC 7-1.1 (SO₂ Emissions Limitations) the SO₂ emissions from the combustion of coal in each of the kilns shall not exceed six (6.0) pounds per MMBtu heat input each. Pursuant to 326 IAC 7-2-1, compliance shall be demonstrated on a ~~30-day rolling~~ **monthly weighted** average. 326 IAC 7-1.1 and 326 IAC 7-2-1 are not federally enforceable.

Paragraph (a) of Condition D.2.17 (now renumbered D.2.16) has been revised as shown below.

Condition D.4.16 (now renumbered D.4.15) has also been revised similarly. D.2.16 is shown as an example.

D.2.16 Record Keeping Requirements

- (a) To document compliance with Conditions ~~D.2.5~~ **D.2.4(a)** and ~~D.2.10~~ **D.2.9**, the Permittee shall maintain records in accordance with (1) through (4) below. Records maintained for (1) through (4) shall be taken monthly and shall be complete and sufficient to establish

compliance with the SO₂ emission limits established in D.2.5(a).

- (1) Calendar dates covered in the compliance determination period;
- (2) Actual **monthly** coal usage since last compliance determination period;
- (3) **Calendar month average sulfur** Sulfur content and heat content;
- (4) **Calendar month average sulfur** Sulfur dioxide emission rates.

326 IAC 7-1.1, 7-2 and 326 IAC 3-4, 3-5, 3-6, and 3-7 are not federally enforceable.

The reporting form has also been changed appropriately.

Comment #69

Condition D.2.6 (NSPS for Portland Cement Plants)

Since Condition D.2.6 provides an explanation of why 40 CFR Part 60, Subparts A and F do not apply to the raw mills and the natural gas fired-burners (EU11, EU11A, EU12, and EU12A), Condition D.2.6 and Condition D.2.7 (Determinations of Nonapplicability) should be combined. If Condition D.2.6 is not combined with Condition D.2.7 into one condition, the nonapplicability determination contained in Condition D.2.6 should also be included in Condition D.2.7.

In any event, include the following at the end of Condition D.2.6: ". . . shall not apply to the raw mills (EU11 and EU12), the natural gas-fired burners (EU11A and EU12A)."

Response #69

Condition D.2.6 (now renumbered D.2.5) includes a requirement that the natural gas fired burners shall not operate at the same time as the coal-fired stoker. Condition D.2.7 (now renumbered D.2.6) simply states that the NSPS does not apply to several units because they are not affected facilities or they have not been constructed or modified since the applicability date of the rule. The distinction between the two conditions is that the first condition establishes an operating condition that the facility must comply with in order to render the requirements of the NSPS not applicable. The second condition states the nonapplicability of the NSPS but does not include emission limits or operating parameters that the facilities must comply with in order to render the rule not applicable. Since IDEM believes this is an important distinction, the two conditions have not been combined.

Condition D.2.6 (now renumbered D.2.5) has been modified to clarify that, contingent upon compliance with the operating restrictions, the NSPS will not apply to the raw mills or the natural gas fired burners. The revised condition is shown below.

D.2.5 NSPS for Portland Cement Plants [326 IAC 12] [40 CFR 60, Subpart F]

Pursuant to minor source modification 093-10597 issued March 1, 1999, the natural gas-fired burners (EU11A and EU12A) shall not operate at the same time as the existing 37 million Btu per hour coal-fired stoker. Therefore, there is no emissions increase for the system and the requirements of 326 IAC 12 (New Source Performance Standards) and 40 CFR Part 60, Subparts A and F, will not apply to the raw mills (EU11 and EU12), **the coal stoker (EU11B and EU12B), or the natural gas-fired burners (EU11A and EU12A).**

Comment #70

Condition D.2.7 (Determinations of Nonapplicability)

Condition D.2.7(a) should be modified as follows:

- (a) "The raw material and storage facilities/emission units (EU09, EU10, F03, F04, F08 and F09); the raw mill facilities/emission units (EU11, EU11A, EU12, and EU12A); and the coal mills listed as insignificant activities in the facilities/emission units description section are not subject to the requirements of the New Source Performance Standards (NSPS), 40 CFR 60, Subparts A and F (Standards of Performance for Portland Cement Plants) because they are not affected facilities that commenced construction or modification after August 17, 1971."

Condition D.2.7(b) should be modified as follows:

- (a) "The conveying system (EU09), the shale crusher (EU10), the coal pile (F04), the coal unloading building (F08), and the raw material stockpiles (F09) are not subject to the requirements of the National Emissions Standards for Hazardous Air Pollutants (NESHAP) 40 CFR 63 Subparts A and LLL, because these facilities/emission units are not affected facilities under the regulation."

Consistent with 40 CFR § 63.1340 and § 63.1341, the phrase: "The three coal mills listed as insignificant activities in the facilities/emission units description section," should be added to the beginning of Condition D.2.7(b) because the three coal mills are not affected facilities under 40 CFR Part 63, Subpart LLL.

To recognize that none of Lehigh's other emission units are subject to 40 CFR Part 60, Subpart Y, Condition D.2.7(c) should be amended as follows: "The coal mills and the coal conveyors are not subject to the requirements of the New Source Performance Standard, 326 IAC 12 and 40 CFR 60, Subpart Y, because they are completely enclosed and there is no discharge to the atmosphere from the coal mills or from the coal conveyors. None of Lehigh's other facilities/emission units are subject to the New Source Performance Standard, 326 IAC 12 and 40 CFR 60, Subpart Y, because they are not affected facilities that were constructed or modified after October 24, 1974."

Consistent with the above comment, please include the following insignificant activity description for the coal conveyors at the beginning of Section D.2 of the permit. "One coal feeder conveyor and one coal unloading conveyor, with nominal rates of 250 tons per hour and 260 tons per hour, respectively, constructed prior to August 17, 1971, with particulate matter emissions controlled by total enclosure."

Response #70

Some of the facilities listed in paragraph (a) of the condition are considered affected facilities under the rule; however, because these facilities were constructed prior to the applicability date of the rule, they are not subject to the NSPS. However, some of the facilities listed in paragraph (a) of the condition are not affected facilities under the NSPS and therefore, would not be subject to the NSPS regardless of their dates of construction. For these reasons, IDEM agrees to change paragraph (a) of the condition to state that "...they are not affected facilities under the rule or they were not constructed or modified after August 17, 1971."

IDEM agrees to add the coal unloading building (F08), the raw material stockpiles (F09), and the coal mills to the NESHAP nonapplicability determination in paragraph (b) of the condition. IDEM has also

added a general statement that none of the facilities listed in Section D.2 of the permit are subject to the requirements of the NSPS, Subpart Y. Additionally, IDEM has included the specific reason why the coal pile is not subject to the requirements of the NSPS, Subpart Y.

The description of the insignificant coal conveyors has been added to the description box in Section D.2 and in Section A.3(n) of the permit.

A.3 Specifically Regulated Insignificant Activities [326 IAC 2-7-1(21)] [326 IAC 2-7-4(c)]
[326 IAC 2-7-5(15)]

This stationary source also includes the following insignificant activities, as defined in 326 IAC 2-7-1(21):

(n) Other categories with emissions below insignificant thresholds as follows:

- (4) **One coal feeder conveyor and one coal unloading conveyor, with nominal rates of 250 tons per hour and 260 tons per hour, respectively, constructed prior to August 17, 1971, with particulate matter emissions controlled by total enclosure.**

Revised Condition D.2.7 (now renumbered D.2.6) is shown below.

D.2.6 Determinations of Nonapplicability [40 CFR 60, Subparts A and F] [40 CFR 63, Subparts A and LLL] [40 CFR 60, Subpart Y]

-
- (a) The raw material handling and storage facilities/emission units (EU09, EU10, F03, ~~and F04~~ , **F08, and F09**) are not subject to the requirements of the New Source Performance Standards (NSPS), 40 CFR 60, Subparts A and F (Standards of Performance for Portland Cement Plants) because they were constructed prior to the applicability date of August 17, 1971 and have not been modified since the applicability date, **or they are not considered affected facilities under the rule.**
- (b) The conveying system (EU09), the shale crusher (EU10), ~~and the coal pile (F04)~~, **the coal unloading building (F08), the raw material stockpiles (F09), and the insignificant coal mills** are not subject to the requirements of the National Emissions Standards for Hazardous Air Pollutants (NESHAP) 40 CFR 63 Subparts A and LLL, because these facilities/emission units are not affected facilities under the regulation.
- (c) The coal mills **and the coal conveyors** are not subject to the requirements of the New Source Performance Standard, 326 IAC 12 and 40 CFR 60, Subpart Y because they are completely enclosed and there is no discharge to the atmosphere from the coal mills.
- (d) **The coal pile (F04) is not subject to the requirements of the New Source Performance Standard, 326 IAC 12 and 40 CFR 60, Subpart Y because it is not considered an affected facility under the regulation. Additionally, facilities/emission units EU09, EU10, F03, F08, F09, EU11A, EU11B, EU12A, EU12B, EU11, EU12, the three insignificant coal mills, the coal feeder conveyor and the coal unloading conveyor are not subject to the requirements of the New Source Performance Standard, 326 IAC 12 and 40 CFR 60, Subpart Y because they are not affected facilities under the rule or they were not constructed or modified after October 24, 1974.**

Comment #71

Condition D.2.8 (Preventive Maintenance Plan)

Please insert a space between Conditions D.2.8 and "Compliance Determination Requirements."

Response #71

The requested change has been made.

Comment #72

Condition D.2.9 (Testing Requirements)

Because the Title V Permit will not regulate Lehigh's activities until the permit becomes effective, Condition D.2.9(b) should reference: "Within 180 days of the effective date of this permit" rather than "Within 180 days after issuance of this permit."

Response #72

Pursuant to IC 13-15-5-3, the permit becomes effective upon issuance; therefore the effective date of the permit and the issuance date of the permit are the same. By stating that conditions are effective upon issuance, the permit clarifies that the permit becomes effective immediately upon issuance.

Comment #73

Condition D.2.10 (Sulfur Dioxide Emissions and Sulfur Content)

Condition D.2.10 should include the following: "326 IAC 7-1.1, 326 IAC 7-2 and 326 IAC 3-4, 3-5, 3-6 and 3-7 are not federally enforceable." The same change should be made to Condition D.2.17(a).

This comment also applies to Condition D.4.10 and D.4.19.

Response #73

The requested change has been made. The last paragraph of Conditions D.2.10 and D.4.10 (now renumbered D.2.9 and D.4.8) have been changed as follows. Condition D.2.9 is shown below as an example.

D.2.9 Sulfur Dioxide Emissions and Sulfur Content [326 IAC 2-7-5(A)] [326 IAC 2-7-6] [326 IAC 7-2]

A determination of noncompliance pursuant to any of the methods specified in (a), (b), (c), or (d) above shall not be refuted by evidence of compliance pursuant to the other method.
326 IAC 7-1.1, 326 IAC 7-2-1 and 326 IAC 3-4, 3-5, 3-6, and 3-7 are is not federally enforceable.

Paragraph (a) of Condition D.2.17 (now renumbered D.2.16) has been revised as shown below. Similar changes have been made to Condition D.4.19 (renumbered D.4.15).

D.2.16 Record Keeping Requirements

(a) To document compliance with Conditions ~~D.2.5~~ **D.2.4(a)** and ~~D.2.10~~ **D.2.9**, the Permittee shall maintain records in accordance with (1) through (4) below. Records maintained for

(1) through (4) shall be taken monthly and shall be complete and sufficient to establish compliance with the SO₂ emission limits established in D.2.5(a).

- (1) Calendar dates covered in the compliance determination period;
- (2) Actual **monthly** coal usage since last compliance determination period;
- (3) **Calendar month average sulfur** Sulfur content and heat content;
- (4) **Calendar month average sulfur** Sulfur dioxide emission rates.

326 IAC 7-1.1, 7-2 and 326 IAC 3-4, 3-5, 3-6, and 3-7 are not federally enforceable.

Comment #74

Condition D.2.11 (Particulate Matter)

Delete "in order to comply with Conditions D.2.1 and D.2.4" from Condition D.2.11. Similar changes should be made to conditions D.3.12, D.4.10, and D.5.11.

Response #74

Based on IDEM's calculations, previous permits, and information supplied in the Part 70 application, IDEM has determined that the control devices referenced in these conditions must be in operation in order for the associated facilities to comply with the emission limits in the referenced conditions. Lehigh has not provided any information to dispute IDEM's belief that these control devices are necessary for compliance; therefore, the proposed change has not been made.

Comment #75

Condition D.2.12 (NESHAP Monitoring Requirements)

Consistent with the facility description for the material storage building, delete the word "raw" in the first sentence of Condition D.2.12(a)(2).

Please add the following as the last sentence of Condition D.2.12(a): "The operations and maintenance plan is not included in this Permit and may be modified by the Permittee without modification or amendment of this Permit. This comment also applies to Conditions D.3.13, D.4.14, and D.5.9

Pursuant to 40 CFR Part 63, Subparts A and LLL, the first sentence of Condition D.2.12(b) should be modified to state the following: ". . . on and after June 14, 2002, the Permittee shall monitor opacity . . ." 40 CFR Part 63, Subpart A applies to owners and operators who are subject to subsequent subparts, and the compliance date for affected sources subject to 40 CFR Part 63, Subpart LLL, is June 14, 2002.

Condition D.2.12, NESHAP Monitoring Requirements, should be set forth under the Compliance Monitoring Requirements Section of D.2. 40 CFR § 63.1350 sets forth the monitoring requirements for affected sources subject to the NESHAP for the Portland Cement Manufacturing Industry. A separate section sets forth the performance test/compliance determination requirements. In fact, the U.S. EPA admits in the Preamble to the NESHAP that changes were made to the monitoring requirements in 40 CFR § 63.1350 (those specifically cited in Condition D.2.12) "to meet the Agency's commitment to incorporate enhanced monitoring in all MACT standards." This comment also applies to Conditions D.3.13, D.4.14, and D.5.12.

Response #75

The reference to the raw material storage building has been changed to material storage building.

IDEM agrees that the contents of the O&M Plan are not part of the permit and may be modified by the Permittee without modification or amendment of the permit. Clarification of this has been added to the conditions now renumbered as D.2.11, D.3.10, D.4.10, and D.5.9.

Paragraph (b) has been revised to include the compliance date of the rule.

All conditions titled "NESHAP Monitoring Requirements" have been moved to the Compliance Monitoring sections of the permit.

Revisions to condition D.2.12 (now renumbered D.2.11) are shown below. Conditions D.3.10, D.4.9, and D.5.9 have been revised similarly.

D.2.11 NESHAP Monitoring Requirements [40 CFR 63, Subpart LLL]

- (a) Pursuant to 40 CFR 63.1350 (Monitoring Requirements), the Permittee shall prepare a written operations and maintenance plan for the material storage building (F03) and each of the raw mills (EU11, EU11A, EU12, and EU12A) by ~~June 10~~ **June 14, 2002**, which is the compliance date for the National Emission Standards for Hazardous Air Pollutants (NESHAP) from the Portland Cement Manufacturing Industry. The plan shall include the following information:
- (1) Procedures for proper operation and maintenance of the affected sources and associated air pollution control device(s) in order to meet the emissions limit in Condition ~~D.2.4~~ **D.2.3**; and
 - (2) Procedures to be used to periodically monitor the ~~raw~~ material storage building (F03), which is subject to opacity standards under 40 CFR 63.1348. Such procedures must include the following provisions:
 - (A) The Permittee shall conduct a monthly 1-minute visible emissions test of each affected source in accordance with 40 CFR 60, Appendix A, Method 22. The test must be conducted while the affected source is in operation.
 - (B) If no visible emissions are observed in six consecutive monthly tests for any affected source, the Permittee may decrease the frequency of testing from monthly to semi-annually for that affected source. If visible emissions are observed during any semi-annual test, the Permittee shall resume testing of that affected source on a monthly basis and maintain that schedule until no visible emissions are observed in six consecutive monthly tests.
 - (C) If no visible emissions are observed during the semi-annual test for any affected source, the Permittee may decrease the frequency of testing from semi-annually to annually for that affected source. If visible emissions are observed during any annual test, the Permittee shall resume testing of that affected source on a monthly basis and maintain that schedule until no visible emissions are observed in six consecutive monthly tests.

- (D) If visible emissions are observed during any Method 22 test, the Permittee must conduct a 6-minute test of opacity in accordance with 40 CFR 60, Appendix A, Method 9. The Method 9 test must begin within one hour of any observation of visible emissions.

- (3) Corrective actions to be taken when required by paragraph (b).

Failure to comply with any provision of the operations and maintenance plan shall be a violation of the standard. **The contents of the operations and maintenance plan are not included in this permit and may be modified by the Permittee without modification or amendment of this permit.**

- (b) Pursuant to 40 CFR 63.1350 (Monitoring Requirements), **on and after June 14, 2002**, the Permittee shall monitor opacity from the raw mills (EU11, EU11A, EU12, and EU12A) by conducting daily visual emissions observations of the mill sweep and air separator particulate matter control devices (PMCDs), in accordance with the procedures of 40 CFR 60, Appendix A, Method 22. The Method 22 test shall be conducted while the affected source is operating at the highest load or capacity level reasonably expected to occur within the day. The duration of the Method 22 test shall be six minutes. If visible emissions are observed during any Method 22 visible emissions test, the Permittee must:
- (1) Initiate, within one (1) hour, the corrective actions specified in the site specific operations and maintenance plan developed in accordance with 40 CFR 63.1350(a)(1) and (a)(2); and
- (2) Within 24 hours of the end of the Method 22 test in which the visible emissions were observed, conduct a visual opacity test of each stack from which visible emissions were observed, in accordance with 40 CFR 60, Appendix A, Method 9. The duration of the Method 9 test shall be thirty minutes.

Comment #76

Condition D.2.18 (Reporting Requirements)

Delete "40 CFR 63.10(d)(5)(i) and (ii)" from the last sentence of Condition D.2.18(b) because this citation does not contain the authority for requiring certification for all of the reports listed in Condition D.2.18.

This comment also applies to Conditions D.3.19, D.4.20, and D.5.19.

Response #76

The citation has been changed to 40 CFR 63.10(d)(5) as shown below. Condition D.2.18 (now renumbered D.2.17) is shown as an example.

D.2.17 Reporting Requirements

- (b) In addition to being submitted to the address listed in Section C - General Reporting Requirements, all reports and the operations and maintenance plan submitted pursuant to 40 CFR 63, Subpart A shall also be submitted to the U.S. EPA at the following address:

United States Environmental Protection Agency, Region V
Air and Radiation Division, Regulation Development Branch - Indiana (AR-18J)

77 West Jackson Boulevard
Chicago, Illinois 60604-3590

Pursuant to 40 CFR 63.10(d)(5)(i) and (ii), the reports submitted by the Permittee shall include the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

Comment #77

Condition D.3.1 (Particulate Matter) [326 IAC 6-3-2]

326 IAC 2-1.1-1(17) defines "Process" as "any combination of equipment that is physically connected and operated in sequence that, when the process is operated, could operate independently to generate energy, refine or produce materials or parts, or produce a finished product." Lehigh disagrees with the grouping of the various processes as proposed. Moreover, Lehigh disagrees with the IDEM's reliance on the definition of "process weight rate" in defining "process." The IDEM's statements regarding the definition of same are not persuasive. A conservative estimate for determining process weight rate is in no way related, transferable or analogous to defining a "process."

Lehigh agrees that the blending bins, identified as EU13, and the kiln supply storage silos, identified as EU14, represent a single process and that the Process Weight Rule applies to all blending bins and kiln supply storage silos as a group not to each individual bin. However, each kiln feed bin (EU18, EU20, and EU22) operates independently to feed a separate kiln (Kiln #1, #2, and #3), which are operated separately and independently, so as to allow each to produce a slightly different grade of cement. Therefore, each kiln feed bin (EU18, EU20, and EU22) should be considered separately. Additionally, the following clinker storage and handling facilities/emission units (EU25, EU26a, EU26b, EU27, EU29) are distinct activities that are operated independently not sequentially, and should be considered separate processes.

Modify Condition D.3.1(a) as follows:

Pursuant to 326 IAC 6-3 (Process Operations), the allowable PM emission rate from raw mill blending and kiln supply storage facilities/emissions units (EU13 and EU14) shall not exceed 61.0 pounds per hour (total for both EU13 and EU14) when operating at a process weight rate of 250 tons per hour.

Add Condition D.3.1(b) as follows:

Pursuant to 326 IAC 6-3 (Process Operations), the allowable PM emission rate from the kiln feed bin #1 (EU18) shall not exceed 47.2 pounds per hour when operating at a process weight rate of 66 tons per hour.

Add Condition D.3.1(c) as follows:

Pursuant to 326 IAC 6-3 (Process Operations), the allowable PM emission rate from the kiln feed bin #2 (EU20) shall not exceed 47.2 pounds per hour when operating at a process weight rate of 66 tons per hour.

Add Condition D.3.1(d) as follows:

Pursuant to 326 IAC 6-3 (Process Operations), the allowable PM emission rate from the kiln feed bin #3 (EU22) shall not exceed 48.2 pounds per hour when operating at a process weight rate of 73 tons per hour.

Add Condition D.3.1(e) as follows:

Pursuant to 326 IAC 6-3 (Process Operations), the allowable PM emission rate from each process listed in (1)-(5) below shall individually not exceed 53.1 pounds per hour when operating at a process weight rate of 120 tons per hour.

- (1) South storage drag, identified as EU25.
- (2) North clinker tower, identified as EU26a.
- (3) North storage drag, identified as EU26b
- (4) South clinker tower, identified as EU27.
- (5) Pan clinker conveyor, identified as EU29.

Relabel existing Conditions D.3.1(c) through D.3.1(m) as Conditions D.3.1(f) through (p) respectively.

Response #77

Revisions to rule 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes) became effective on June 12, 2002. The revised rule established limits for manufacturing processes, which is defined as "any single or series of actions, operations, or treatments in which a mechanical, physical, or chemical transformation of material occurs that emits or has the potential to emit particulate in the production of the product. This term includes transference, conveyance, or repair of a product." This definition of "manufacturing process" makes clear that several individual pieces of equipment that are used to accomplish a single task should be considered as one single manufacturing process.

The blending bins and the kilns supply silos feed material to the kiln feed bins, which in turn feed material to each of the kilns. These units were grouped together as one single manufacturing process because they operate dependently in sequence and are used to accomplish one goal, intermediate preparation and storage of milled raw material before being sent to the kilns. Lehigh's Part 70 permit includes several categories of emission units, one of which is the raw mill storage facilities/emission units. Lehigh's Part 70 permit lists the kiln feed bins as part of the raw mill storage facilities/emission units. IDEM agrees that kiln feed bins are part of the raw mill storage facilities/emission units and has therefore applied the rule 326 IAC 6-3-2 accordingly.

The clinker exiting the coolers is transferred to the finish mills via several conveyors and ladders, including the south storage drag (EU25), north clinker tower (EU26a) and scrap bin clinker tower (EU26b), south clinker tower (EU27), and the pan conveyor (EU29). These facilities were grouped together because they are interconnected facilities that have one specific function which is to transfer clinker from the coolers to the finish mill system. The definition of manufacturing process in the revised rule makes clear that the conveyance of material is one single process regardless of whether one or many conveyors are used to transfer the material from one point in the process to another.

The conditions referencing 326 IAC 6-3-2 have been modified according to the rule revisions; however, no changes to the emission limits have been made as a result of this comment.

Comment #78

Condition D.3.5 (Supersession of a Condition in a Previously Issued Construction Permit)

Consistent with the facility description and the other references in Condition D.3.5, change the last reference to the scrap bin clinker ladder from "EU26" to "EU26c."

Response #78

Condition D.3.5 (now renumbered D.3.2) has been changed as requested. The revision is shown below.

D.3.2 Supersession of a Condition in a Previously Issued Construction Permit [326 IAC 12] [40 CFR 60, Subpart F]

CP 093-2770-00002, issued March 3, 1993 stated that pursuant to the New Source Performance Standards, 326 IAC 12 (40 CFR 60.60 through 60.66) Subpart F, (Standards of Performance for Portland Cement Plants), visible emissions from the hydrated lime feed system (EU38) and the clinker ladders (EU26c, EU28, and EU30) shall not exceed 10% opacity (40 CFR 60.62(c)). However, upon further review, it has been determined that the three clinker ladders (EU28, EU30, and EU26c) which were permitted in CP 093-2770-00002, were updates to existing drop points, which reduced emissions. Therefore, they were not "modifications" as defined in 40 CFR 60.14. Consequently, 40 CFR 60, Subpart F does not apply to the clinker ladders (EU28, EU30, and EU26c).

Comment #79

Condition D.3.7 (NESHAP Emissions Limitations)

Condition D.3.7 should reference "the conveyor transfer points associated with the following clinker handling facilities/emission units (EU25, EU26a, EU26b, EU27, and EU29), the roll crusher (EU31)..." instead of "the conveyor transfer points associated with the following clinker handling facilities/emission units (EU25, EU26a, EU26b, EU27, EU29, and EU31)..."

Response #79

IDEM agrees. The requested change has been made as shown below. The condition has been renumbered as D.3.4.

D.3.4 NESHAP Emissions Limitation [40 CFR 63, Subpart LLL]

Pursuant to 40 CFR 63.1348 (Emissions Standards and Operating Limits), on and after ~~June 10~~ **June 14, 2002**, which is the compliance date for the National Emission Standards for Hazardous Air Pollutants (NESHAP) from the Portland Cement Manufacturing Industry, the visible emissions from each of the raw mill storage facilities/emissions units (EU13, EU14, EU18, EU20 and EU22), the conveyor transfer points associated with the clinker handling facilities/emission units (EU25, EU26a, EU26b, EU27, ~~and EU29, and EU31~~), **the roll crusher (EU31)**, the finish mill facilities/emission units (EU32 through EU36, and EU38), and the finish material storage and bulk loading and packaging facilities/emission units (EU37, EU39 through EU47, and F06) shall not exceed ten percent (10%) opacity. **On and after June 14, 2002, 326 IAC 5-1-2 shall not apply to the facilities/emission units subject to the opacity limit in this condition.**

Comment #80

Condition D.3.8 (Determinations of Nonapplicability)

Consistent with Condition D.3.5, the explanations regarding the south storage drag and the pan clinker conveyor in the Technical Support Document, the definition of an "affected facility," and the effective date of 40 CFR Part 60, Subpart F; Condition D.3.8 should be amended as follows:

The raw mill storage facilities/emission units (EU13, EU14, EU18, and EU20), the clinker handling facilities/emission units (EU25, EU26a, EU26b and EU29), the finish mill facilities/emission units (EU32,

EU33 and EU34), and the finish material storage facilities/emission units (EU37, EU39A, EU39B, EU40A and EU40B); and the bulk loading and packaging facilities/emission units (EU41 through EU46 and F06) and the scrap bin clinker ladder, the hot spout clinker ladder and the east clinker ladder, which are not emission units, are not subject to the requirements of the New Source Performance Standards (NSPS), 40 CFR 60, Subparts A and F (Standards of Performance for Portland Cement Plants), because they are not affected facilities that were constructed or modified after August 17, 1971.

Additionally, Condition D.3.8 should also include nonapplicability determinations for 40 CFR Part 63, Subparts A and LLL. Please include "40 CFR 63, Subparts A and LLL" in the title to Condition D.3.8, label the above-referenced paragraph Condition D.3.8(a), and include a new paragraph Condition D.3.8(b) which includes the nonapplicability determinations for 40 CFR Part 63, Subpart LLL.

Since the NESHAP for Portland Cement Manufacturing Industry only applies to the conveyor transfer points associated with the clinker handling facilities/emission units (EU25, EU26a, EU26b, EU27, and EU29), as stated in Conditions D.3.6 and D.3.7, Condition D.3.8(b) should state as follows: "The clinker handling facilities/emission units (EU25, EU26a, EU26b, EU27, and EU29), with the exception of the conveyor transfer points associated therewith, and the scrap bin clinker ladder, the hot spout clinker ladder and the east clinker ladder which are not emission units are not subject to the requirements of the NESHAP, 40 CFR Part 63, Subparts A and LLL because they are not affected facilities under said regulation."

Response #80

IDEM agrees that the clinker handling facilities (EU25, EU26a, EU26b, EU26c, EU28, EU29, and EU30) are not subject to the requirements of the NSPS, Subpart F. Paragraph (a) of the condition has been revised to include these units. Some of the facilities listed in paragraph (a) of the condition are considered affected facilities under the rule; but because these facilities were constructed prior to the applicability date of the rule, they are not subject to the NSPS. However, some of the facilities listed in paragraph (a) of the condition are not affected facilities under the NSPS and therefore, would not be subject to the NSPS regardless of their dates of construction. For these reasons, IDEM has changed paragraph (a) of the condition to state that "...they are not affected facilities under the rule or they were not constructed or modified after August 17, 1971."

The condition has been revised to include the nonapplicability determinations for the NESHAP, Subpart LLL. This statement is now in paragraph (b) of the condition.

It is already clearly stated in Conditions D.3.3 and D.3.4 that the NESHAP only applies to the conveyor transfer points associated with the clinker handling facilities/emission units (EU25, EU26a, EU26b, EU27, and EU29). Stating in the Nonapplicability Determinations condition that these emission units (with the exception of the conveyor transfer points associated with them) are not subject to the NESHAP, would only cause confusion, since the same emission unit number would be listed in the NESHAP condition and the Nonapplicability Determinations condition. The current language in D.3.3 and D.3.4 is sufficient to make very clear that only the conveyor transfer points are subject to the NESHAP.

Revisions to Condition D.3.8 (now renumbered D.3.5) are shown below.

D.3.5 Determinations of Nonapplicability [40 CFR 60, Subparts A and F] [**40 CFR 63, Subparts A and LLL**]

-
- (a) The raw mill storage facilities/emissions units (EU13, EU14, EU18, and EU20), the finish mill facilities/emission units (EU32, EU33, and EU34), **the clinker handling facilities (EU25, EU26a, EU26b, EU26c, EU28, EU29, and EU30)**, and the finish material storage and bulk loading and packaging facilities/emission units (EU37, EU39A, EU39B, EU40A,

EU40B, ~~and~~ EU41 through EU46 ~~and F06~~) are not subject to the requirements of the New Source Performance Standards (NSPS), 40 CFR 60, Subparts A and F (Standards of Performance for Portland Cement Plants) because **they are not affected facilities under the rule** or they were **not constructed or modified after** prior to the applicability date of August 17, 1971 ~~and have not been modified since the applicability date.~~

- (b) **The clinker handling facilities/emission units (EU26c, EU28, and EU30) are not subject to the requirements of the New Source Performance Standards (NSPS), 40 CFR 63, Subparts A and LLL (Standards of Performance for Portland Cement Plants) because they are not affected facilities under the regulation.**

Comment #81

Condition D.3.11 (Testing Requirements)

Consistent with 40 CFR § 63.1349(c), include the following in Condition D.3.11(a): "This test shall be repeated once every five (5) years from the date of the valid compliance demonstration."

Conditions D.3.11(b) and (c) require duplicative testing of facilities/emissions units and require that said testing be repeated within a specified time frame from the tests conducted for each specific condition. Delete the PM testing required in Condition D.3.11(c), because Condition D.3.11(b) already requires same for EU36. Modify the remaining requirements contained in Condition D.3.11 accordingly.

Response #81

IDEM agrees to revise the condition as suggested. The revised condition (renumbered D.3.8) is shown below.

D.3.8 Testing Requirements [326 IAC 2-7-6(1),(6)] [40 CFR 63, Subpart LLL] [326 IAC 2-1.1-11]

- (a) Within 180 days after ~~June 10~~ **June 14, 2002**, which is the compliance date for the Portland Cement Manufacturing Industry NESHAP, the Permittee shall demonstrate initial compliance with the limit established in Condition ~~D.3.7~~ **D.3.4** by conducting a test in accordance with 40 CFR 63.1349 and Method 9 of 40 CFR Part 60, Appendix A. Testing shall be conducted in accordance with Section C - Performance Testing. **These tests shall be repeated at least once every five (5) years from the date of this valid compliance demonstration.**
- (b) Within 180 days after issuance of this **Part 70** permit, in order to demonstrate compliance with Condition D.3.1(d), (e), (f), and (g), the Permittee shall perform PM testing on the Finish mill #1 (EU32), Finish mill #2 (EU33), Finish mill #3 (EU34), and Finish Mill #4 (**EU35**). ~~and Within 180 days after issuance of this Part 70 permit, in order to demonstrate compliance with Conditions D.3.1 and D.3.6 (d) and (e), the Permittee shall conduct PM and PM10 testing on the finish mill #4 separator (EU35 and EU36). These tests shall be conducted~~ utilizing methods as approved by the Commissioner. These tests shall be repeated at least once every five (5) years from the date of this valid compliance demonstration. Testing shall be conducted in accordance with Section C- Performance Testing. **PM10 includes filterable and condensable PM10.** All associated facilities exhausting to a single stack must all be operating when determining compliance with the limit.

~~(c) Within 180 days after issuance of this permit, in order to demonstrate compliance with~~

~~Condition D.3.9 (j) and (k), the Permittee shall perform PM and PM10 testing on the Finish mill #4 separator (EU36), utilizing methods as approved by the Commissioner. These tests shall be repeated at least once every five (5) years from the date of this valid compliance demonstration. PM10 includes filterable and condensable PM10. Testing shall be conducted in accordance with Section C-Performance Testing.~~

Comment #82

Condition D.3.13 (NESHAP Monitoring Requirements)

Consistent with the facility descriptions and 40 CFR § 63.1350, Condition D.3.13(a) should be modified as follows:

Pursuant to 40 CFR § 63.1350 (Monitoring Requirements), the Permittee shall prepare a written operations and maintenance plan for the raw mill storage facilities/emissions units (EU13, EU14, EU18, EU20 and EU22), the conveyor transfer points associated with the clinker handling facilities/emission units (EU25, EU26a, EU26b, EU27, and EU29), the roll crusher (EU31), the finish mill facilities/emission units (EU32 through EU36 and EU38), and the finish material storage and bulk loading and packaging facilities/emission units (EU37, EU39 through EU47, and F06) by June 14, 2002, which is the compliance date for the National Emission Standards for Hazardous Air Pollutants (NESHAP) from the Portland Cement Manufacturing Industry. The Plan shall include the following information: . . .

Consistent with the facility descriptions, delete the word "raw" from the reference to the material storage building in Condition D.3.13(a)(2).

Consistent with 40 CFR § 63.1340, include Condition D.3.13(a)(2)(A) should reference "the conveyor transfer points associated with the clinker handling facilities/emission units (EU25, EU26a, EU26b, EU27, and EU29), the roll crusher (EU31), the finish material storage facilities/emission units" rather than "the clinker handling facilities/emission units (EU25, EU26a, EU26b, EU27, EU29, and EU31), the finish material storage facilities/emission units..."

Response #82

IDEM agrees to revise paragraph (a) of the condition as suggested. The reference to the raw material storage building in (a)(2) has been removed since the raw material storage building is described in Section D.2 of the permit. IDEM agrees to revise (a)(2)(A) as suggested. The revised condition (now renumbered D.3.10) is shown below. See also comment and response #75.

D.3.10 NESHAP Monitoring Requirements [40 CFR 63, Subpart LLL]

-
- (a) Pursuant to 40 CFR 63.1350 (Monitoring Requirements), the Permittee shall prepare a written operations and maintenance plan for the raw mill storage facilities/emissions units (EU13, EU14, EU18, EU20 and EU22), the **conveyor transfer points associated with the** clinker handling facilities/emission units (EU25, EU26a, EU26b, EU27, and **EU29** ~~EU31~~), **the clinker handling facility/emission unit described as the roll crusher (EU31),** the transfer points associated with the pan-clinker conveyor (EU29), the lime bin ~~(EU38)~~, the finish mill facilities/emission units (EU32 through EU36 **and EU38**), and the finish material storage and bulk loading and packaging facilities/emission units (EU37, EU39 through EU47, and F06) by ~~June 10~~ **June 14**, 2002, which is the compliance date for the National Emission Standards for Hazardous Air Pollutants (NESHAP) from the Portland Cement Manufacturing Industry. The plan shall include the following information:

- (1) Procedures for proper operation and maintenance of the affected sources and associated air pollution control device(s) in order to meet the emissions limit in Condition ~~D-3.7~~ **D.3.4**; and
- (2) Procedures to be used to periodically monitor the ~~raw material storage building (F03)~~ **affected facilities**, which ~~is~~ **are** subject to opacity standards under 40 CFR 63.1348. Such procedures must include the following provisions:
 - (A) The Permittee shall conduct a monthly 1-minute visible emissions test on each stack exhaust (S-RMDC5 through S-RMDC8, S-KDC1, S-KDC3, S-KDC5, S-FDC1 through S-FDC3, S-FDC5, S-FDC7, S-FDC13, and S-SDC1 through S-SDC12) associated with the raw mill storage facilities/emissions units (EU13, EU14, EU18, EU20 and EU22), the **conveyor transfer points associated with the** clinker handling facilities/emission units (EU25, EU26a, EU26b, EU27, **and** EU29, ~~and EU31~~), **the clinker handling facility/emission unit described as the roll crusher (EU31)**, the finish mill material storage facilities/emission units (EU37, EU39A, EU39B, EU40A, and EU40B), the bulk loading and packaging facilities/emission units (EU41 through EU47), the lime bin (EU38), and the truck loadout station (F06) in accordance with 40 CFR 60, Appendix A, Method 22. The test must be conducted while the source is in operation.
 - (B) If no visible emissions are observed in six consecutive monthly tests for any affected source, the Permittee may decrease the frequency of testing from monthly to semi-annually for that affected source. If visible emissions are observed during any semi-annual test, the Permittee shall resume testing of that affected source on a monthly basis and maintain that schedule until no visible emissions are observed in six consecutive monthly tests.
 - (C) If no visible emissions are observed during the semi-annual test for any affected source, the Permittee may decrease the frequency of testing from semi-annually to annually for that affected source. If visible emissions are observed during any annual test, the Permittee shall resume testing of that affected source on a monthly basis and maintain that schedule until no visible emissions are observed in six consecutive monthly tests.
 - (D) If visible emissions are observed during any Method 22 test, the Permittee must conduct a 6-minute test of opacity in accordance with 40 CFR 60, Appendix A, Method 9. The Method 9 test must begin within one hour of any observation of visible emissions.
- (3) Corrective actions to be taken when required by paragraph (b).

Failure to comply with any provision of the operations and maintenance plan shall be a violation of the standard. **The contents of the operations and maintenance plan are not included in this permit and may be modified by the Permittee without modification or amendment of this permit.**

- (b) Pursuant to 40 CFR 63.1350 (Monitoring Requirements), on and after ~~June 10~~ **June 14**,

2002, the Permittee shall monitor opacity from the finish mills (EU32 through EU36) by conducting daily visual emissions observations of the mill sweep and air separator particulate matter control devices (PMCDs), in accordance with the procedures of 40 CFR 60, Appendix A, Method 22. The Method 22 test shall be conducted while the affected source is operating at the highest load or capacity level reasonably expected to occur within the day. The duration of the Method 22 test shall be six minutes. If visible emissions are observed during any Method 22 visible emissions test, the Permittee must:

- (1) Initiate, within one (1) hour, the corrective actions specified in the site specific operations and maintenance plan developed in accordance with 40 CFR 63.1350(a)(1) and (a)(2); and
- (2) Within 24 hours of the end of the Method 22 test in which the visible emissions were observed, conduct a visual opacity test of each stack from which visible emissions were observed, in accordance with 40 CFR 60, Appendix A, Method 9. The duration of the Method 9 test shall be thirty minutes.

Comment #83

Conditions D.4.1 (Particulate Matter)

Delete Condition D.4.1(b). Pursuant to 326 IAC 6-3-1(b), if an emission limitation has been established by a NSPS or has been established in a Part 70 Permit, then the limitation in 326 IAC 6-3 does not apply. Since a PM NSPS has been established for kiln #3, 326 IAC 6-3 does not apply to kiln #3. As such, delete Condition D.4.1(b) and the equation listed below said condition for kiln #3. On and after June 14, 2002, Kilns #1 and #2 will be subject to the PM limit required by the NESHAP and established in Condition D.4.6. Lehigh has previously requested that the NESHAP limitation set forth in Condition D.4.6 be used in lieu of 326 IAC 6-3-2 limits. Accordingly, include the following to the end of Condition D.4.1: "Pursuant to 326 IAC 6-3-1, 326 IAC 6-3 and Condition D.4.1 shall not apply to kiln #3 (EU17). On and after June 14, 2002, 326 IAC 6-3 and Condition D.4.1 shall not apply to kilns #1 and #2 (EU15 and EU16)."

Condition D.5.1 (Particulate Matter)

Delete D.5.1(c). Pursuant to 326 IAC 6-3-1(b), if an emission limitation has been established by a NSPS or has been established in a Part 70 Permit, then the limitation in 326 IAC 6-3 does not apply. Since a PM NSPS has been established for clinker cooler #3, 326 IAC 6-3 does not apply to clinker cooler #3. As such, delete Condition D.5.1(c). On and after June 14, 2002, clinker cooler #1 and #2 will be subject to the PM limit required by the NESHAP and established in Condition D.5.6. Lehigh has previously requested that the NESHAP limitation set forth in Condition D.5.6 be used in lieu of 326 IAC 6-3-2 limits. Accordingly, include the following to the end of Condition D.5.1: "Pursuant to 326 IAC 6-3-1, 326 IAC 6-3 and Condition D.5.1 shall not apply to clinker cooler #3 (EU23). On and after June 14, 2002, 326 IAC 6-3 and Condition D.5.1 shall not apply to clinker coolers #1 and #2 (EU19 and EU21)."

Response #83

Rule 326 IAC 6-3-2 has been revised. The revised rule became effective on June 12, 2002. The rule now states that any facility subject to an emission limit established by a NSPS or NESHAP is not subject to the requirements of 326 IAC 6-3-2, if the limitation established by the NSPS or NESHAP is more stringent than the limitation in 326 IAC 6-3-2. The kiln #3 and clinker cooler #3 are both subject to PM limits under the NSPS until June 14, 2002, and thereafter all of the kilns and clinker coolers are subject to PM limits under the NESHAP. Therefore, IDEM agrees that all of the kilns and clinker coolers are

exempt from the requirements of 326 IAC 6-3-2. Conditions D.4.1 and D.5.1 have been deleted. All subsequent conditions in Sections D.4 and D.5 have been renumbered appropriately. The conditions which were deleted from the permit are shown below.

~~D.4.1 Particulate Matter (PM) [326 IAC 6-3-2]~~

- ~~(a) Pursuant to 326 IAC 6-3-2 (Process Operations), the allowable PM emission rate from kiln #1 (EU15) and kiln #2 (EU16), shall not exceed 92.47 pounds per hour each when operating at a process weight rate of 38 tons per hour each.~~
- ~~(b) Pursuant to 326 IAC 6-3-2 (Process Operations), the allowable PM emission rate from kiln #3 (EU17) shall not exceed 43.2 pounds per hour when operating at a process weight rate of 43 tons per hour. This limit shall not apply until June 10 ~~June 14~~, 2002.~~

~~The pounds per hour limitations for kilns #1 and #2 were calculated with the following equation:~~

$$\text{E} = 15.0 \text{ P}^{0.56} \quad \text{where E = rate of emission in pounds per hour and} \\ \text{P} = \text{process weight rate in tons per hour}$$

~~The pounds per hour limitation for kiln #3 was calculated with the following equation:~~

~~Interpolation and extrapolation of the data for the process weight rate in excess of 60,000 pounds per hour shall be accomplished by use of the equation:~~

$$\text{E} = 55.0 \text{ P}^{0.11} - 40 \quad \text{where E = rate of emission in pounds per hour; and} \\ \text{P} = \text{process weight rate in tons per hour}$$

~~D.5.1 Particulate Matter (PM) [326 IAC 6-3-2]~~

- ~~(a) Pursuant to 326 IAC 6-3-2 (Process Operations), the allowable PM emission rate from clinker cooler #1 (EU19) shall not exceed 42 pounds per hour when operating at a process weight rate of 38 tons per hour.~~
- ~~(b) Pursuant to 326 IAC 6-3-2 (Process Operations), the allowable PM emission rate from clinker cooler #2 (EU21) shall not exceed 42 pounds per hour when operating at a process weight rate of 38 tons per hour.~~
- ~~(c) Pursuant to 326 IAC 6-3-2 (Process Operations), the allowable PM emission rate from clinker cooler #3 (EU23) shall not exceed 43 pounds per hour when operating at a process weight rate of 43 tons per hour. This limit shall not apply until June 10 ~~June 14~~, 2002.~~
- ~~(d) The pounds per hour limitations were calculated with the following equation:~~

~~Interpolation and extrapolation of the data for the process weight rate in excess of 60,000 pounds per hour shall be accomplished by use of the equation:~~

$$\text{E} = 55.0 \text{ P}^{0.11} - 40 \quad \text{where E = rate of emission in pounds per hour; and} \\ \text{P} = \text{process weight rate in tons per hour}$$

Comment #84

Condition D.4.4 (NSPS for Portland Cement Plants)

Consistent with 326 IAC 6-3-1, add the following to the end of this condition: "326 IAC 6-3 shall not

apply to the facilities/emission units listed in this condition because a PM limitation has been established by a NSPS."

Pursuant to 326 IAC 5-1-1(a), add the following to the end of this condition: "326 IAC 5-1-2 shall not apply to the facilities/emission units listed in this condition because an opacity limitation has been established by a NSPS for said facilities/emission units."

This comment also applies to Condition D.3.4 and D.5.3.

Response #84

The NSPS 40 CFR 60, Subpart F only applies until the NESHAP 40 CFR 63, Subpart LLL becomes applicable on June 14, 2002. Since this permit will be issued after June 14, 2002, all conditions stating that the NSPS Subpart F applies have been deleted from the permit. This includes conditions D.3.4, D.4.4, and D.5.3, as well as many other references to 40 CFR 60, Subpart F. At Lehigh's request, IDEM has not removed the nonapplicability determination conditions regarding 40 CFR 60, Subpart F. Changes to the permit are shown below. Additionally, all other Conditions in the affected sections have been renumbered appropriately, and references to conditions have been revised appropriately.

~~D.3.3 General Provisions Relating to NSPS [326 IAC 12-1][40 CFR Part 60, Subpart A]~~

~~The provisions of 40 CFR Part 60, Subpart A - General Provisions, which are incorporated by reference in 326 IAC 12-1, apply to the kiln feed bin #3 (EU22), the south clinker tower (EU27), the roll crusher (EU31), the finish mill #4 and associated feed bin (EU35), the finish mill separator (EU36), the lime bin (EU38), and the cement packing machine (EU47) described in this section except when otherwise specified in 40 CFR Part 60, Subpart F. On and after June 10 **June 14**, 2002, the general provisions of 40 CFR 63, Subpart A, as stated in Condition D.3.6, will supersede this condition and the general provisions of 40 CFR 60, Subpart A.~~

~~D.3.4 NSPS for Portland Cement Plants [326 IAC 12] [40 CFR 60, Subpart F]~~

~~Pursuant to CP093-2770 issued March 3, 1993, and 326 IAC 12 (New Source Performance Standards) and 40 CFR 60.62(c), the visible emissions from kiln feed bin #3 (EU22), the south clinker tower (EU27), the roll crusher (EU31), the finish mill #4 and associated feed bin (EU35), the finish mill separator (EU36), the lime bin (EU38), and the cement packing machine (EU47) shall not exhibit ten percent (10%) opacity or greater. On and after June 10 **June 14**, 2002, this condition shall be superseded by the NESHAP opacity limitation stated in Condition D.3.7.~~

~~D.3.15 Record Keeping Requirements~~

- ~~(d) To document compliance with the NSPS 40 CFR Subpart F, the Permittee shall maintain all records required by 40 CFR 60.65 including the daily production rates and kiln feed rates.~~
- ~~(e) To document compliance with the NESHAP 40 CFR 63, Subpart LLL, the Permittee shall maintain all records required by 40 CFR 63.1355. On and after the NESHAP compliance date, this record keeping requirement shall supersede the NSPS 40 CFR 60 Subpart F record keeping requirements of part (d) of this condition. These records include the following:~~
 - ~~(1) The Permittee shall maintain files of all information (including all reports and notifications) required by 40 CFR 63.1355(a), recorded in a form suitable and readily available for inspection and review as required by 40 CFR 63.10(b)(1).~~

- (2) The Permittee shall maintain records for each affected source as required by 40 CFR 63.10(b)(2) and (3) including:
 - (A) All documentation supporting initial notifications and notifications of compliance status under 40 CFR 63.9.
 - (B) All records of applicability determination, including supporting analyses.
- (f) (e) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

D.3.16 Reporting Requirements

- (b) In addition to being submitted to the address listed in Section C - General Reporting Requirements, all reports and the operations and maintenance plan submitted pursuant to 40 CFR 63, Subpart A and 40 CFR 60, Subpart A shall also be submitted to the U.S. EPA at the following address:

~~D.4.3 General Provisions Relating to NSPS [326 IAC 12-1][40 CFR Part 60, Subpart A]~~

- ~~(a) The provisions of 40 CFR Part 60, Subpart A - General Provisions, which are incorporated by reference in 326 IAC 12-1, apply to kiln #3 (EU17), except when otherwise specified in 40 CFR 60, Subpart F.~~

- ~~(b) On and after June 10 **June 14**, 2002, the general provisions of 40 CFR 63, Subpart A, as stated in Condition D.4.5, will supersede this condition and the general provisions of 40 CFR 60, Subpart A.~~

~~D.4.4 NSPS for Portland Cement Plants [326 IAC 12] [40 CFR 60, Subpart F]~~

~~The NSPS for Portland Cement Plants (40 CFR 60, Subpart F) applies to kiln #3 (EU17). Pursuant to 326 IAC 12 (New Source Performance Standards) and 40 CFR 60.62(a), particulate matter emissions from kiln #3 shall each not exceed **comply with the following limits**:~~

- ~~(a) Three-tenths (0.30) pound per ton of feed (dry basis) to the kiln; and~~

- ~~(b) Visible emissions which exhibit greater **less** than twenty percent (20%) opacity.~~

~~On and after June 10 **June 14**, 2002, this condition shall be superseded by the NESHAP particulate matter and opacity limitations stated in Condition D.4.6.~~

~~D.4.128 Continuous Emissions Monitoring [326 IAC 3-5][40 CFR 60, Subpart F] [326 IAC 2-7-6(1),(6)] [40 CFR 63, Subpart LLL]~~

~~Pursuant to 326 IAC 3-5 (Continuous Monitoring of Emissions), 326 IAC 2-1.1-11 and/or 40 CFR Parts 60 and 63, a continuous monitoring system shall be installed, calibrated, maintained, and operated for measuring the opacity from **the stacks associated with** each of the kilns (**S-KP1 and S-KP2**), pursuant to 326 IAC 3-5. The continuous opacity monitor shall be installed and operational prior to conducting the performance tests required in Conditions ~~D.4.8~~ **D.4.5** and ~~D.4.9~~. The continuous opacity monitor shall meet the performance specifications of 326 IAC 3-5-2 and 40 CFR 63.8(c). 326 IAC 3-5 is not federally enforceable. On and after June 10 **June 14**, 2002, the NSPS requirements regarding the COM for kiln #3 shall be superseded by the NESHAP requirements regarding the COM.~~

~~D.4.13 Kiln Feed Rates [40 CFR 60, Subpart F]~~

~~Pursuant to 40 CFR Parts 60.63(a), the daily clinker production rates and kiln feed rates of kiln #3 shall be recorded. This condition applies to kiln #3. On and after June 14, 2002, this condition shall be superseded by the requirements of 40 CFR 63, Subpart LLL.~~

~~D.4.109 NESHAP Monitoring Requirements [40 CFR 63, Subpart LLL]~~

- (c) The Permittee shall continuously monitor opacity of emissions at the outlet of the PM control device. The COM required by Condition ~~D.4.12~~ **D.4.8** shall be used to monitor opacity emissions in accordance with the NESHAP 40 CFR 63, Subpart LLL and shall be installed, maintained, calibrated and operated as required by 40 CFR 63, Subpart A ~~and according to 40 CFR 60, Appendix B, PS-1.~~

~~D.4.153 Record Keeping Requirements~~

- (d) To document compliance with the NESHAP 40 CFR 63, Subpart LLL, the Permittee shall maintain all records required by 40 CFR 63.1355. ~~On and after the NESHAP 40 CFR 63, Subpart LLL compliance date, this record keeping requirement shall supersede the NSPS 40 CFR 60 Subpart F record keeping requirements of part (e) of this condition.~~ These records include the following:

- (e) ~~To document compliance with the NSPS 40 CFR 60 Subpart F, the Permittee shall maintain all records required by 40 CFR 60.65.~~

- ~~(f)~~ All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

~~D.4.164 Reporting Requirements~~

- ~~(b)~~ A quarterly summary of excess opacity emissions, as defined in 326 IAC 3-5-7 (and 40 CFR 60.63(d) if applicable), from the continuous monitoring system, shall be submitted to the address listed in Section C - General Reporting Requirements, of this permit, within thirty (30) days after the end of the quarter being reported. If applicable, the excess opacity summary shall also be submitted in accordance with 40 CFR 60.7(c), 40 CFR 60.63(d) and 40 CFR 63.1354(8) (beginning June 10 **June 14, 2002**).

- ~~(f)~~(e) In addition to being submitted to the address listed in Section C - General Reporting Requirements, all reports and the operations and maintenance plan submitted pursuant to 40 CFR 63, Subpart A ~~and 40 CFR 60, Subpart A~~ shall also be submitted to the U.S. EPA at the following address:

~~D.5.2 General Provisions Relating to NSPS [326 IAC 12-1][40 CFR Part 60, Subpart A]~~

~~The provisions of 40 CFR Part 60, Subpart A - General Provisions, which are incorporated by reference in 326 IAC 12-1, apply to clinker cooler #3 (EU23) except when otherwise specified in 40 CFR Part 60, Subpart F. On and after June 10 **June 14, 2002**, the general provisions of 40 CFR 63, Subpart A, as stated in Condition D.5.5, will supersede this condition and the general provisions of 40 CFR 60, Subpart A.~~

~~D.5.3 NSPS for Portland Cement Plants [326 IAC 12] [40 CFR 60, Subpart F]~~

~~Pursuant to 326 IAC 12 (New Source Performance Standards) and 40 CFR 60.62(b), particulate matter emissions from clinker cooler #3 (EU23) shall not exceed:~~

~~_____ (a) One-tenth (0.10) pound per ton of feed (dry basis) to kiln #3; and~~

~~_____ (b) Visible emissions greater than ten percent (10%) opacity.~~

~~_____ On and after June 10 **June 14**, 2002, this condition shall be superseded by the NESHAP opacity limitation stated in Condition D.5.6. Compliance with the limitation in part (a) of this condition will also satisfy the requirements of Condition D.5.1 and 326 IAC 6-3-2 (Process Operations).~~

D.5.7 Continuous Emissions Monitoring [326 IAC 3-5] [326 IAC 2-1.1-11] [40 CFR 63, Subpart LLL]

(a) Pursuant to 326 IAC 3-5 (Continuous Monitoring of Emissions), 326 IAC 2-1.1-11, **and 40 CFR Part 63 (on and after June 14, 2002)**, and/or 40 CFR Part 60, a continuous monitoring system shall be installed, calibrated, maintained, and operated for measuring opacity from the clinker coolers (EU19, EU21 and EU23). **326 IAC 3-5 is not federally enforceable.**

(b) The continuous monitoring systems shall meet the performance specifications of 326 IAC 3-5-2 **and 40 CFR 63.8(c)**, and 40 CFR 60.13 (for clinker cooler #3 (EU23)), and shall ~~demonstrate continuous compliance with Section C - Opacity, and Conditions D.5.3 (b) and D.5.6(b).~~ **326 IAC 3-5 is not federally enforceable.**

~~_____ (c) 326 IAC 3-5 is not federally enforceable. On and after June 10 **June 14**, 2002, the NSPS requirements regarding the COM for clinker cooler #3 shall be superseded by the NESHAP requirements regarding the COM.~~

D.5.184 Record Keeping Requirements

(d) To document compliance with the NESHAP 40 CFR 63, Subpart LLL, the Permittee shall maintain all records required by 40 CFR 63.1355. ~~On and after the NESHAP compliance date, this record keeping requirement shall supersede the NSPS 40 CFR 60 Subpart F record keeping requirements of part (f) of this condition.~~ These records include the following:

(f) ~~To document compliance with the NSPS 40 CFR 60 Subpart F, the Permittee shall maintain all records required by 40 CFR 60.65.~~

~~_____ (g) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.~~

D.5.195 Reporting Requirements

(a) A quarterly summary of excess opacity emissions, as defined in 326 IAC 3-5-7 and 40 ~~GFR 60.63(d)~~ **63.10**, from the continuous monitoring system shall be submitted to the address listed in Section C - General Reporting Requirements, of this permit, within thirty (30) days after the end of the quarter being reported. If applicable, the excess opacity summary shall also be submitted in accordance with ~~40 CFR 60.63(d) and 40 CFR 63.1354(8)~~ (beginning ~~June 10~~ **June 14**, 2002).

Comment #85

Condition D.4.6 (NESHAP Emissions Limitation)

Consistent with 326 IAC 6-3-1, add the following to the end of this condition: "On and after June 14,

2002, 326 IAC 6-3 and Condition D.4.1 shall not apply to the facilities/emission units listed in this condition."

This comment also applies to Condition D.5.6.

Response #85

Rule 326 IAC 6-3-2 has been revised. Revised rule 326 IAC 6-3-2 became effective on June 12, 2002. The rule now states that any facility subject to an emission limit established by a NSPS or NESHAP is not subject to the requirements of 326 IAC 6-3-2 if the limitation pursuant to the NESHAP or NSPS is more stringent than the limitation in 326 IAC 6-3-2. The kiln #3 and clinker cooler #3 are both subject to PM limits under the NSPS until June 14, 2002, and thereafter all of the kilns and clinker coolers are subject to PM limits under the NESHAP. Therefore, IDEM agrees that all of the kilns and clinker coolers are exempt from the requirements of 326 IAC 6-3-2. Conditions D.4.1 and D.5.1 have been deleted.

Since 326 IAC 6-3-2 and the NSPS no longer apply to the kilns, the corresponding testing requirements in Condition D.4.6 have been removed from the permit. All subsequent conditions in Section D.4 have been renumbered appropriately.

~~D.4.6 Cyclical Testing Requirements [326 IAC 2-7-6(1),(6)] [326 IAC 2-1.1-11] [40 CFR 60, Subpart F]~~

- ~~(a) Within 180 days of permit issuance, the Permittee shall demonstrate compliance with the limits established in Conditions D.4.1 and D.4.4, by conducting performance tests for PM and opacity from all three kilns, utilizing methods as approved by the Commissioner.~~
- ~~(b) Within 180 days of permit issuance, the Permittee shall demonstrate compliance with the limits established in Condition D.4.2, by conducting performance tests for SO₂ from all three kilns, utilizing methods as approved by the Commissioner. These tests shall be repeated at least once every 2.5 years from the date of the first valid compliance demonstration.~~
- ~~(c) During each stack test required above, the following items shall be performed:~~
 - ~~(1) Certified continuous opacity monitoring (COM) data shall be observed and recorded or EPA Method 9 opacity tests shall be performed.~~
 - ~~(2) The kiln temperature and oxygen concentration shall be measured and recorded.~~
 - ~~(3) The clinker production rate shall be measured and recorded.~~
 - ~~(4) Pursuant to 326 IAC 3-6-3(b)(2) and 40 CFR 63.7(e), the tests shall be conducted under representative operating conditions.~~
 - ~~(5) Pursuant to 326 IAC 3-6-3(b)(3), each kiln and clinker cooler must be operating at 95 percent of its maximum production capacity or more during the performance tests to be considered a valid test.~~
- ~~(d) All tests shall be conducted in accordance with Section C - Performance Testing.~~

Comment #86

Condition D.4.7 (Preventive Maintenance Plan)

The phrase "is required for each of the kilns facilities/emission units and the control devices" should be replaced with the phrase "is required for the control devices KP1, KP2 and KP3." Preventive Maintenance Plans, required by 326 IAC 1-6-3(a) and Condition B.11, focus on "inspecting, maintaining, and repairing emission control devices." (emphasis added). Furthermore, Lehigh is not able to identify any preventative maintenance on the kilns that would relate to the ability to comply with emission limitations.

This comment also applies to Condition D.5.7.

Response #86

The Preventive Maintenance Plan requirement must be included in every applicable Title V permit pursuant to 326 IAC 2-7-5 (13). This rule refers back to the Preventive Maintenance Plan requirement found in 326 IAC 1-6-3. This Preventive Maintenance Plan rule sets out the requirements for:

- (1) Identification of the individuals responsible for inspecting, maintaining and repairing the emission control equipment (326 IAC 1-6-3 (a)(1)),
- (2) The description of the items or conditions in the facility that will be inspected and the inspection schedule for said items or conditions (326 IAC 1-6-3(a)(2)), and
- (3) The identification and quantification of the replacement parts for the facility which the Permittee will maintain in inventory for quick replacement (326 IAC 1-6-3 (a) (2)).

Pursuant to 326 IAC 1-6-1 (Applicability), 326 IAC 1-6-3 applies to the owner or operator of any facility required to obtain a permit under 326 IAC 2-1-2 and 326 IAC 2-1-4. Therefore, it is clear from the structure of 326 IAC 1-6-3 that the PMP requirement affects the entirety of the applicable facilities. Only 326 IAC 1-6-3 (a)(1) is limited, in that it requires identification of the personnel in charge of only the emission control equipment, and not any other facility equipment. In additional support of this position, 326 IAC 1-6-5 provides that the commissioner may require changes in the maintenance plan to reduce excessive malfunctions in any control device or combustion or process equipment. Therefore, it is also clear from the structure of 326 IAC 1-6-5 that the PMP requirement affects the emission unit as well as the control device.

There have been no changes to the permit as a result of this comment.

Comment #87

Condition D.4.7 (Preventive Maintenance Plan)

Because, Lehigh may develop its Operations and Maintenance Plan prior to the applicability date of 40 CFR Part 63, Subpart LLL (June 14, 2002), the second sentence of Condition D.4.7 should be restated as follows: "If Lehigh develops its Operations and Maintenance Plan required by Condition D.4.14, said plan shall satisfy the requirements of this condition."

Response #87

IDEM agrees that the O&M Plan can be used to satisfy the requirements of the PMP as soon as it has been developed as long as it satisfies the requirements of Section B - Preventive Maintenance Plan. To clarify this, changes to Conditions D.4.7 (now renumbered D.4.4) and D.5.7 (now renumbered D.5.4) have been made as shown below. Even though the Permittee did not request the same change for Condition D.3.10 (now renumbered D.3.7), the same change has been made to that condition as well. Changes are

shown to Condition D.4.7 (now renumbered D.4.4) as an example.

D.4.4 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for each of the kilns facilities/emissions units and the control devices KP1, KP2, and KP3. If the Operations and Maintenance Plan required by Condition ~~D.4.14~~ **D.4.9** is developed in accordance with Section B - Preventive Maintenance Plan, then ~~once after June 10, 2002~~, the Operations and Maintenance Plan **has been developed, it** shall satisfy this condition.

Comment #88

Conditions D.4.8 and D.5.8 (NESHAP Testing Requirements)

Pursuant to the IDEM's Compliance Monitoring Guidance and the EPA's Periodic Monitoring Guidance (see p. 15 and p. 5 respectively), the NESHAP monitoring requirements satisfy federal periodic monitoring requirements as well as Indiana's compliance monitoring requirements. The NESHAP, 40 CFR § 63.1349(c), requires PM performance tests for the kilns once every five years. This condition should only require repeat performance tests for PM every 5 years and repeat performance tests for Dioxin/Furan every 2 ½ years. Therefore, the last sentence of this condition should be modified as follows: "The test for PM shall be repeated at least once every 5 years and the test for dioxin/furan shall be repeated at least once 2 ½ years from the date of this valid compliance demonstration."

The NESHAP, 40 CFR § 63.1349(c), requires PM performance tests for the clinker coolers once every five years and does not require additional performance tests for opacity. Condition D.5.8 should only require repeated performance tests for PM every 5 years. Therefore, modify the last sentence of this condition as follows: "The test for PM shall be repeated at least once every five (5) years from the date of this valid compliance demonstration."

Response #88

IDEM has the authority under 326 IAC 2-1.1-11 to require testing at any time to assure compliance with all applicable requirements. Additionally, IDEM has the authority under 326 IAC 2-7-6(1) to require periodic testing to determine on-going compliance with the emission limits in the permit. Therefore, IDEM may require testing more frequently than 40 CFR 63, Subpart LLL requires. IDEM has determined that kilns and clinker coolers should be tested every 2.5 years to show compliance with applicable rules.

Comment #89

Condition D.4.8 (NESHAP Testing Requirements)

The NESHAP, at Section 63.1349(e), requires sources to repeat the performance tests for kilns within ninety (90) days of initiating any significant change in the feed or fuel from that used in the previous performance test. "Significant change" is not defined in the rule. Please include the following at the end of this condition:

"Significant change" for purposes of 40 CFR 63.1349(e) does not include:

- (a) a change in the combination of fuels used, provided the fuel type is allowed by this Permit and the fuel is used consistent with any applicable limitations; and
- (b) any change in the combination of raw materials.

See the Settlement Agreement referenced in the General Comments. Please be advised that pursuant to Section C(1) of the Settlement Agreement, the U.S. EPA has agreed that sources that must conduct repeat performance tests as a result of a significant change in feeds or fuel to the kiln may operate under planned operational conditions while preparing for and conducting the performance test for a period not to exceed 360 hours. The U.S. EPA has agreed to revise 40 CFR 63.1349(e) as set forth in the settlement document.

Response #89

The NESHAP does not include a definition of "significant change;" therefore, IDEM contacted Scott Throwe of U.S. EPA, who is listed on EPA's Air Toxics website as the compliance lead for the NESHAP 40 CFR 63, Subpart LLL. Mr. Throwe stated that the intent of the NESHAP is to require a source to retest the kiln if any change made in the fuels or raw materials could increase emissions of any pollutant regulated by the rule. Mr. Throwe stated that the best way for a source to obtain maximum flexibility under the rule would be to test the worst case scenarios during the initial compliance test. This might involve testing several scenarios initially since one raw material/fuel combination might provide the worst case PM emissions and another raw material/fuel combination might provide the worst case dioxan/furan emissions. However, the initial expense of testing these worst case scenarios would allow the source to have the flexibility to change raw materials and fuel combinations until the next required stack test.

IDEM is aware of the settlement agreement; however, until a rule change becomes final, no change to the permit can be made. The permit must reflect the current version of the rules.

Comment #90

Condition D.4.9 (Cyclical Testing Requirements)

Please replace "from all three kilns" in Conditions D.4.9(a) and (b) with "from each of the kiln exhaust stack (S-KP1 and S-KP2)."

The last sentence of Condition D.4.9(b) should be modified as follows: "These tests shall be repeated once every 5 years from the date of the first valid compliance demonstration."

Delete "40 CFR 63.7(e)" in Condition D.4.9(c)(4) because Condition D.4.8 contains the NESHAP performance testing requirements.

Please replace "maximum production capacity" in Condition D.4.9(c)(5) with "nominal production rate."

Response #90

Condition D.4.6 (Cyclical Testing Requirements) has been deleted from the permit. See comment and response #85.

Comment #91

Condition D.4.10 (Particulate Matter)

Delete the reference to "CP093-4598, issued February 27, 1998" in Condition D.4.10 because said construction permit was revoked by the IDEM.

Response #91

IDEM agrees that the permit has been revoked and that it should not be referenced in Condition D.4.10 (now renumbered D.4.6). The revised condition is shown below.

D.4.6 Particulate Matter (PM)

~~Pursuant to CP093-4598 issued February 27, 1998, except~~ **Except** as otherwise provided by statute, rule or this permit, the ESPs (KP1, KP2, and KP3) for PM control shall be in operation at all times when the associated kiln is in operation, in order to demonstrate compliance with Conditions ~~D.4.1, D.4.4, and D.4.6~~ **D.4.3**.

Comment #92

Condition D.4.12 (Continuous Emissions Monitoring)

Consistent with the facilities/emission units descriptions, and to acknowledge that 40 CFR Part 63 does not become effective until June 14, 2002, Condition D.4.12 should be modified as follows: "Pursuant to 326 IAC 3-5, (Continuous Monitoring of Emissions), 326 IAC 2-1.1-11 and/or 40 CFR Part 60 and 40 CFR Part 63 (on or after June 14, 2002), a continuous monitoring system shall be installed, calibrated, maintained, and operated for measuring the opacity from each kiln exhaust stack (S-KP1 and S-KP2). . . and 40 CFR 63.8(c) (on or after June 14, 2002) . . . On and after June 14, 2002, the NSPS . . ."

Response #92

IDEM agrees that opacity is measured in the **stacks** associated with the kilns. The condition has been revised to clarify that the monitors should measure opacity from the stacks. References to the NSPS 40 CFR 60, Subpart F have been removed from the condition since the NSPS no longer applies after June 14, 2002. Revised Condition D.4.12 (now renumbered D.4.8) is shown below.

D.4.8 Continuous Emissions Monitoring [326 IAC 3-5] [326 IAC 2-7-6(1),(6)] [40 CFR 63, Subpart LLL]

Pursuant to 326 IAC 3-5 (Continuous Monitoring of Emissions), 326 IAC 2-1.1-11 and/or 40 CFR Parts ~~60 and~~ 63, a continuous monitoring system shall be installed, calibrated, maintained, and operated for measuring the opacity from **the stacks associated with** each of the kilns, pursuant to 326 IAC 3-5. The continuous opacity monitor shall be installed and operational prior to conducting the performance tests required in Conditions ~~D.4.8~~ **D.4.5** and ~~D.4.9~~. The continuous opacity monitor shall meet the performance specifications of 326 IAC 3-5-2 and 40 CFR 63.8(c). 326 IAC 3-5 is not federally enforceable. ~~On and after June 14, 2002, the NSPS requirements regarding the COM for kiln #3 shall be superseded by the NESHAP requirements regarding the COM.~~

Comment #93

Condition D.4.13 (Kiln Feed Rates)

Please reword Condition D.4.13 as follows: "Pursuant to 40 CFR 60.63(a), the daily clinker production rate and kiln feed rate of Kiln #3 (EU17) shall be recorded. Kilns #1 and #2 are not subject to 40 CFR Part 60.

Additionally, consistent with Condition D.4.3, include the following to Condition D.4.13: "On and after June 14, 2002 the general provisions of 40 CFR 63, Subpart A will supercede this condition and the

general provisions of 40 CFR 60, Subpart A."

Response #93

The NSPS 40 CFR 60, Subpart F only applies until the NESHAP 40 CFR 63, Subpart LLL becomes applicable on June 14, 2002. Since this permit will be issued after June 14, 2002, all conditions stating that the NSPS Subpart F applies have been deleted from the permit. This includes conditions D.4.13, as well as many other references to 40 CFR 60, Subpart F. See response to comment #84.

~~D.4.13 Kiln Feed Rates [40 CFR 60, Subpart F]~~

~~Pursuant to 40 CFR Parts 60.63(a), the daily clinker production rates and kiln feed rates shall be recorded. This condition applies to kiln #3.~~

Comment #94

Condition D.4.15 (Preventive Inspections)

Delete Condition D.4.15 because the IDEM does not cite any authority for the requirements contained in this condition. In any event, pursuant to Conditions B.11 and D.4.7, Lehigh must prepare and maintain a Preventative Maintenance Plan which includes a "description of the items or conditions that will be inspected and the inspection schedule for said items or conditions." Therefore, specific PMP items and/or schedules need not be included in the permit.

In any event, previous drafts only required that said inspections be conducted once every two (2) years, not every six (6) months. No authority or rationale is provided for increasing the frequency.

In any event, the last sentence of Condition D.4.15 should be amended as follows: "In accordance with Conditions B.12 and B.15, Permittee's failure to follow response steps may constitute a violation of the permit if the failure to respond causes an exceedance of a permit limit."

Response #94

The ESPs controlling the kilns must operate properly at all times to assure that the kilns maintain continuous compliance with all applicable requirements. In order to assure proper operation of the ESPs, IDEM has included permit conditions requiring the Permittee to inspect the ESPs on a periodic basis. IDEM has the authority to require such monitoring pursuant to 326 IAC 2-7-5(1) and 326 IAC 2-7-6(1). These rules are cited in the title of the compliance monitoring section of the permit.

The inspection schedule has been revised to be consistent with Lehigh's shutdown schedule for the kilns. Lehigh has stated that the kilns are usually shutdown annually for maintenance. Therefore, the condition now requires preventive inspections during each annual shutdown, but no less often than once every 14 months.

Failure to take any response steps after observing an abnormal condition during an ESP inspection is considered a violation of the permit. An abnormal condition of the ESP can indicate a pending malfunction of the control device. An ESP failure could cause an exceedance of a particulate matter limitation or an exceedance of an opacity limit. Without performing a stack test, the Permittee could not affirm that the abnormal conditions in the ESP would not cause a violation of the particulate matter limits in the permit, if the source chose to operate the kiln without first taking response steps to correct the abnormal conditions of the ESP. It is unlikely that the Permittee would be able to perform a particulate matter stack test immediately upon observing the abnormal conditions of the ESP during the inspection. Without taking any response steps or doing any stack tests, the only information available regarding

emissions would be that the inspection showed some "abnormal" condition of the ESP. Without any other evidence to the contrary, the abnormal ESP conditions would be credible evidence that the emissions from the stack could be in violation of the particulate matter limits in the permit. For these reasons, the Permittee is required to take response steps whenever the ESP inspections reveal an abnormal condition of the ESP, and the failure to take any response steps in accordance with the CRP will be considered a violation of the permit.

IDEM has determined that the calibration of the instruments used to determine the T-R set current and voltages should be required on the same schedule that the ESP inspections are required. Therefore, the requirement to calibrate the instruments has been moved from Condition D.4.11 (Parametric Monitoring) to Condition D.4.10 (Preventive Inspections).

Revised Condition D.4.15 (now renumbered D.4.10) is shown below.

D.4.10 Preventive Inspections

In order to document compliance with the applicable PM and dioxin/furan limits specified in Conditions ~~D.4.1, D.4.4, and D.4.6~~ **D.4.3** the following inspections shall be performed for each ESP ~~at least once during each annual shutdown, but no less often than once every six~~ **14** months, in accordance with the Preventive Maintenance Plan prepared in accordance with Section B - Preventive Maintenance Plan:

- (1) Plate and electrode alignment;
- (2) ESP component/controller failure; ~~and~~
- (3) Air and water infiltration; ~~and~~
- (4) **Calibration of the instruments used to determine the T-R set current and voltages.**

~~Plate and electrode alignment measurements shall be taken whenever there is an outage of any nature lasting more than three days unless such measurements have been taken within the past three months.~~

All ~~other~~ inspections shall be made whenever there is an outage of any nature lasting more than three days unless such measurements have been taken within the past three months.

Appropriate response steps for any ~~discrepancies~~ **failures, malfunctions, or abnormal conditions** in the above list found during the inspection shall be taken in accordance with Section C - Compliance ~~Monitoring Response Plan - Failure to Take Response Steps~~ **Preparation, Implementation, Records, and Reports**. Failure to take response steps in accordance with Section C - Compliance ~~Monitoring Response Plan - Failure to Take Response Steps~~ **Preparation, Implementation, Records, and Reports**, shall be considered a violation of this permit.

Comment #95

Condition D.4.16 (Parametric Monitoring)

Delete Condition D.4.16 because the IDEM does not cite any authority for the requirements contained in this condition. The provisions of this Condition are not consistent with the periodic monitoring requirements of the NESHAP. Pursuant to the IDEM's Compliance Monitoring Guidance and the EPA's Periodic Monitoring Guidance (see p. 15 and p. 5 respectively), the NESHAP monitoring requirements satisfy federal periodic monitoring requirements as well as Indiana's compliance monitoring requirements. The final NESHAP does not contain the proposed requirement. Since the NESHAP does not require the monitoring set forth in this condition, it should be deleted. Furthermore, the monitoring

required was changed from daily to one per shift without citing an explanation or the authority for the requirement. Additionally, the provisions of this Condition are inconsistent with Condition B.13, Emergency Provisions.

In any event, the last sentence of Condition D.4.16(a) should be amended as follows: "In accordance with Conditions B.12 and B.15, Permittee's failure to follow response steps may constitute a violation of the permit if the failure to respond causes an exceedance of a permit limit."

Response #95

The ESPs controlling the kilns must operate properly at all times to assure that the kilns maintain continuous compliance with all applicable requirements. In order to assure proper operation of the ESPs, IDEM has included permit conditions requiring the Permittee to monitor the performance of the ESPs by monitoring certain ESP operating parameters once per shift. IDEM has the authority to require such monitoring pursuant to 326 IAC 2-7-5(1) and 326 IAC 2-7-6(1). These rules are cited in the title of the compliance monitoring section of the permit.

While the nature of a facility's operation may not vary from shift to shift, the personnel at the facility does change from shift to shift. The OAQ believes that all shifts should be in tune with the work practices necessary to ensure continual compliance with permit requirements. These work practices should include an understanding and awareness of proper ESP operating parameters. This knowledge and awareness during all shifts can minimize lag time in addressing control failure.

Failure to take any response steps after observing an out of range voltage or current reading is considered a violation of the permit. An abnormal condition of the ESP can indicate that the control device is not operating at peak efficiency, or possibly a malfunction of the ESP. Less than optimum operation of the ESP could cause an exceedance of a particulate matter limitation or an exceedance of an opacity limit. Without performing a stack test, the Permittee could not affirm that the abnormal conditions in the ESP were not causing a violation of the particulate matter limits in the permit. It is unlikely that the Permittee would be able to perform a particulate matter stack test immediately upon observing the abnormal conditions of the ESP. Without taking any response steps or doing any stack tests, the only information available regarding emissions would be that the voltage or current readings were outside of the normal range of operation of the ESP. Without any other evidence to the contrary, the abnormal ESP conditions would be credible evidence that the emissions from the stack could be in violation of the particulate matter limits in the permit. For these reasons, the Permittee is required to take response steps whenever the voltage or current readings of the ESP are outside of the normal range, and the failure to take any response steps in accordance with the CRP will be considered a violation of the permit.

IDEM has made changes to the condition in order to clarify that an out of range reading is not considered to be a deviation from the permit. The requirement to calibrate instruments has been moved to Condition D.4.10. Revisions to the condition (now renumbered D.4.11) are shown below.

D.4.11 Parametric Monitoring

-
- (a) The ability of the ESPs to control particulate emissions shall be monitored once per shift, when the units are in operation, by measuring and recording the primary and secondary voltages and the currents of the transformer-rectifier (T-R) sets.
- (a)(b) ~~Appropriate response steps shall be taken in accordance with Section C -- Compliance Monitoring Plan -- Failure to Take Response Steps whenever operation is outside any of the following ranges or whenever less than 90% of the total T-R sets are functioning:~~
When for any one reading, the voltage or current is outside one of the normal

ranges shown below, or a range established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports. A voltage or current reading outside the normal range is not a deviation from this permit.

- (1) Primary voltage: 260 - 300 V
- (2) Secondary voltage: 35 - 55 kV
- (3) T-R set primary current: 50 - 75 A

Failure to take response steps in accordance with Section C - Compliance ~~Monitoring~~ **Response Plan - Failure to Take Response Steps Preparation, Implementation, Records, and Reports**, shall be considered a violation of this permit.

~~(b) The instrument used for determining the voltages and the T-R set current shall comply with Section C - Pressure Gauge and Other Instrument Specifications, of this permit, shall be subject to approval by IDEM, OAG, and shall be calibrated at least once every six (6) months.~~

Comment #96

Condition D.4.17 (Opacity Readings)

Delete the first sentence of Condition D.4.17 and all of Condition D.4.17(a) because the IDEM does not cite any authority for the requirements contained in this condition. Moreover, this condition does not allow Lehigh the flexibility necessary to be responsive to presently unknown circumstances. In the Summary of Changes Since Proposal section of the NESHAP, the EPA discusses its decision to remove the proposed requirement to track and statistically analyze opacities at levels below the standards because the proposed requirements were extreme. The final NESHAP does not contain the proposed requirement. Furthermore, Condition B.13, Emergency Provisions specifies the responses to be implemented in the event of an emergency.

As required by Condition C.18, Lehigh will develop a Compliance Monitoring Plan, which will include response steps for when the regulatory limit for opacity is exceeded.

In any event, the last sentence of Condition D.4.17(a) should be amended as follows: "In accordance with Conditions B.12 and B.15, Permittee's failure to follow response steps may constitute a violation of the permit if the failure to respond causes an exceedance of a permit limit."

This comment also applies to Condition D.5.16 (Opacity Readings).

Response #96

Lehigh is required pursuant to 326 IAC 3-5 and 40 CFR 63, Subpart LLL to operate continuous opacity monitors (COM) to measure opacity from the kilns and clinker coolers. Pursuant to 40 CFR 63, Subpart LLL, the kilns are subject to a 20% opacity limit and the clinker coolers are subject to a 10% opacity limit. Pursuant to these rules, the kilns and clinker coolers are also subject to stringent particulate matter emission rates. The condition does not establish an opacity limit that is more stringent than the opacity limits established by the NESHAP 40 CFR 63, Subpart LLL. Rather, the condition requires the Permittee to take response steps when the opacity is above the level of normal operating conditions. During normal operations opacity from the kilns and coolers is less than five percent, as evidenced by the results of IDEM approved stack testing. Since the stack testing demonstrated compliance with the PM

emissions when opacity levels were well below the opacity limits, it is appropriate for Lehigh to take response steps when the opacity goes above the levels demonstrated during a compliant stack test. An opacity reading that is above the level of normal operating conditions and requires a response step is not considered a violation. It is only a violation if the Permittee fails to take any response steps. IDEM has the authority to require such monitoring pursuant to 326 IAC 2-7-5(1) and 326 IAC 2-7-6(1).

This condition is not inconsistent with the requirements of Section B - Emergency Provisions because not every opacity reading that is above the level of normal operating conditions is caused by an emergency.

Failure to take any response steps after observing an opacity level that is above the level typical for normal operations is considered a violation of the permit. Unusually high opacity levels can indicate a process upset or a malfunction of the control device. Either of these situations could cause an exceedance of a particulate matter limitation. Without performing a stack test, the Permittee could not affirm that the unusually high opacity levels were not indicating a violation of the particulate matter limits in the permit. It is unlikely that the Permittee would be able to perform a particulate matter stack test immediately upon observing unusually high opacity levels from a stack. Without taking any response steps or doing any stack tests, the only information available regarding emissions would be that the opacity levels were unusually high. Without any other evidence to the contrary, the unusually high opacity levels would be credible evidence that the emissions from the stack could be in violation of the particulate matter limits in the permit. For these reasons, the Permittee is required to take response steps whenever unusually high opacity levels are observed and the failure to take any response steps in accordance with the CRP will be considered a violation of the permit.

For clarification purposes, the condition has been changed to state that the opacity level that triggers the need for a response step is not an instantaneous reading, but rather based on three (3) consecutive six (6) minute averaging periods. The revised condition (now renumbered D.4.12) is shown below.

D.4.12 Opacity Readings

The ability of the ESP to control particulate emissions shall be monitored by continuously measuring and recording the opacity of emissions from each of the kiln stack exhausts (S-KP1 and S-KP2).

- (a) Appropriate response steps shall be taken in accordance with Section C - Compliance **Monitoring Response Plan - Failure to Take Response Steps Preparation, Implementation, Records, and Reports** whenever the opacity exceeds 18 percent for **three (3) consecutive six (6) minute averaging periods**. Failure to take response steps in accordance with Section C - Compliance **Monitoring Response Plan - Failure to Take Response Steps Preparation, Implementation, Records, and Reports**, shall be considered a violation of this permit.
- (b) The opacity shall be determined by the certified continuous opacity monitor required in Condition ~~D.4.12~~ **D.4.8**.

Condition D.5.16 (now renumbered D.5.13) has been revised similarly as shown below.

D.5.13 Opacity Readings

The ability of the baghouses to control particulate emissions shall be monitored by continuously measuring and recording the opacity of emissions from each of the clinker cooler stack exhausts (S-KDC2, S-KDC4, and S-KDC6).

- (a) Appropriate response steps shall be taken in accordance with Section C - Compliance

~~Monitoring Response Plan - Failure to Take Response Steps Preparation, Implementation, Records, and Reports~~ whenever the opacity exceeds 8 percent for **three (3) consecutive six (6) minute averaging periods**. Failure to take response steps in accordance with Section C - Compliance ~~Monitoring Response Plan - Failure to Take Response Steps Preparation, Implementation, Records, and Reports~~, shall be considered a violation of this permit.

- (b) The opacity shall be determined by the certified continuous opacity monitor required in Condition ~~D.5.10~~ **D.5.7**.

Comment #97

Condition D.4.18 (Visible Emission Notations)

Delete Condition D.4.18 because the IDEM does not cite any authority for the requirements contained in this provision. Furthermore, the regulations that require the continuous monitoring should be relied on in the event of a malfunction of a continuous monitor.

In any event, the last sentence of Condition D.4.18(b) should be amended as follows: "In accordance with Conditions B.12 and B.15, Permittee's failure to follow response steps may constitute a violation of the permit if the failure to respond causes an exceedance of a permit limit."

This comment also applies to Condition D.5.17 (Visible Emission Notations).

Response #97

Conditions D.4.18 and D.5.17 have been deleted. The requirements in paragraph (a) are already specified in Section C - Maintenance of Opacity Monitoring Equipment. The requirements in paragraph (b) are already specified in Condition D.4.17 (now renumbered D.4.13) and D.5.16 (now renumbered D.5.13). All subsequent conditions in Sections D.4 and D.5 have been renumbered appropriately. The conditions which have been removed from the permit are shown below.

~~D.4.14 Visible Emissions Notations~~

- ~~(a) Whenever the continuous opacity monitor is malfunctioning for a period of four (4) hours or more, visible emission readings shall be performed in accordance with Section C - Maintenance of Opacity Monitoring Equipment, until such time that the continuous opacity monitor is back in operation.~~
- ~~(b) The Compliance Response Plan for these units shall contain troubleshooting contingency and response steps for when an abnormal emission is observed or whenever the opacity exceeds 18 percent. Failure to take response steps in accordance with Section C - Compliance Monitoring Plan - Failure to Take Response Steps, shall be considered a violation of this permit.~~

~~D.5.14 Visible Emissions Notations~~

- ~~(a) Whenever the continuous opacity monitor is malfunctioning for a period of four (4) hours or more, visible emission readings shall be performed in accordance with Section C - Maintenance of Opacity Monitoring Equipment, until such time that the continuous opacity monitor is back in operation.~~
- ~~(b) The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed or when opacity~~

~~exceeds eight percent (8%). Failure to take response steps in accordance with Section C - Compliance Monitoring Plan - Failure to Take Response Steps, shall be considered a violation of this permit.~~

Comment #98

Condition D.4.19 (Record Keeping Requirements)

Delete the reference to "D.4.13" in Condition D.4.19(c) because the records required to be maintained in Condition D.4.19(c)(1) through (7) do not pertain to Condition D.4.13. In any event, the requirements contained in Condition D.4.13 will be superceded by 40 CFR Part 63, Subpart A on June 14, 2002.

Response #98

Condition 4.13 (Kiln Feed Rates) has been deleted from the permit because it was a requirement of the NSPS 40 CFR 60, Subpart F, which is only applicable until June 14, 2002. See response to comment #84. Additionally, many conditions in Section D.4 have been renumbered; therefore, the references to conditions have all been changed appropriately.

Comment #99

Condition D.4.20 (Reporting Requirements)

Condition D.4.20(d)(1) should reference "D.4.6" rather than "D.4.7"

Response #99

IDEM agrees that Condition D.4.20 (now renumbered as D.4.14) should have referenced Condition D.4.6 (NESHAP Emissions Limitation), which is now renumbered as D.4.3.

D.4.14 Reporting Requirements

~~(d)~~(c) Beginning ~~June 10~~ **June 14**, 2002, the Permittee shall submit a semi-annual summary report which contains the information specified in 40 CFR 63.10(e)(3)(vi), as well as the following:

- (1) All exceedances of maximum control device inlet gas temperature limits specified in Condition ~~D.4.7~~ **D.4.3**.

Comment #100

Condition D.5.4 (Determinations of Nonapplicability)

The last phrase of Condition D.5.4 should be modified as follows: "because they are not affected facilities that were constructed or modified after August 17, 1971."

Response #100

The clinker coolers are considered affected facilities under the rule; however, because these facilities were not constructed or modified after the applicability date of the rule, they are not subject to the NSPS. Therefore, the statement in Condition D.5.4 (now renumbered D.5.1) correctly explains why the clinker coolers were not subject to the NSPS, 40 CFR 60, Subpart F. No change has been made to the permit

as a result of this comment.

Comment #101

Condition D.5.10 (Continuous Emissions Monitoring)

Include "(on or after June 14, 2002)" after "40 CFR Part 63" in Condition D.5.10(a).

Rephrase the first sentence of Condition D.5.10 as follows: ". . . 326 IAC 3-5-2 and if applicable 40 CFR 60.13 and 40 CFR 63.8."

In the last phrase of Condition D.5.10(b), delete the phrase "and shall demonstrate continuous compliance with Section C - Opacity, and Conditions D.5.3(b) and D.5.6(b)." This explanatory phrase is appropriate for the technical support document, but not the permit.

Response #101

It is not necessary to add the phrase "on or after June 14, 2002" since this permit will not be issued until after June 14, 2002. The reference to 40 CFR 60.13 has been deleted since the NSPS will no longer apply after June 14, 2002. Paragraph (b) has been revised as requested. Revised Condition D.5.10 (now renumbered D.5.7) is shown below.

D.5.7 Continuous Emissions Monitoring [326 IAC 3-5] [326 IAC 2-1.1-11] [40 CFR 63, Subpart LLL]

- (a) Pursuant to 326 IAC 3-5 (Continuous Monitoring of Emissions), 326 IAC 2-1.1-11, **and 40 CFR Part 63 (on and after June 14, 2002), and/or 40 CFR Part 60**, a continuous monitoring system shall be installed, calibrated, maintained, and operated for measuring opacity from the clinker coolers (EU19, EU21 and EU23). **326 IAC 3-5 is not federally enforceable.**
- (b) The continuous monitoring systems shall meet the performance specifications of 326 IAC 3-5-2 **and 40 CFR 60.13 (for clinker cooler #3 (EU23)), and shall demonstrate continuous compliance with Section C - Opacity, and Conditions D.5.3 (b) and D.5.6(b). 326 IAC 3-5 is not federally enforceable.**
- ~~(c) 326 IAC 3-5 is not federally enforceable. On and after June 10 June 14, 2002, the NSPS requirements regarding the COM for clinker cooler #3 shall be superseded by the NESHAP requirements regarding the COM.~~

Comment #102

The Forms section did not contain an Excess Opacity Emissions Summary, Semiannual Summary Report Form, or a Continuous Monitoring System Performance Report Form as is required to be submitted by the Draft Permit. Please include same or advise that use of a specific form is not necessary.

Response #102

The use of a specific form is not necessary. The Permittee may develop forms for use in submitting this information.

Comment #103

Please confirm that a certification by a responsible official is not required to be submitted with the Emergency Occurrence Report and the Quarterly Report. Pursuant to 326 IAC 2-7-6(1), any document required by a Part 70 permit shall contain a certification by a responsible official that meets the requirements of 326 IAC 2-7-4(f).

Response #103

Rule 326 IAC 2-7-16(b)(4) (Emergency Provision) requires notification within four (4) daytime business hours after the beginning or discovery of an emergency, and 326 IAC 2-7-16(b)(5) requires the submittal of a faxed or written notice within 2 working days of the time when emission limitations were exceeded due to the emergency. Rule 326 IAC 2-7-6(1) requires that any document or report required by a Part 70 permit must include a certification by the responsible official. Many applicants have stated that obtaining a certification by the responsible official would cause difficulty in meeting the requirement to submit the report within 2 days. Therefore IDEM and EPA have agreed that the report which is required to be submitted within 2 days of an exceedance does not require a certification by the responsible official. Instead, the emergencies must be reported again in the Quarterly Deviation and Compliance Monitoring Report with a certification by the responsible official. Reporting the emergency again in the Quarterly Deviation and Compliance Monitoring Report fulfills the obligation to satisfy the requirements of 326 IAC 2-7-6(1) which requires reports to be certified.

The quarterly report does require the certification by the responsible official. This is stated in the conditions which require the report (D.2.17(c) and D.4.14(e)) and also at the bottom of the quarterly report form.

Comment #104

Lehigh notes that all of the changes requested to be made to the permit should also be reflected in the appropriate sections of the Technical Support Document (TSD).

Response #104

IDEM prefers to have the TSD document the reasoning for the public noticed version of the permit. This addendum to the TSD explains any changes to the permit after public notice. This method provides documentation for each step in the permit process. As a result, IDEM does not make changes to the TSD after public notice.

Comment #105

In the Federal Rule Requirements section of the TSD, delete "However, once the source has operated as a major source after the effective date of the NESHAP, the source may not change its status after the effective date of the NESHAP in order to render the requirements of the NESHAP not applicable to the source" at the top of page 16 of the TSD. There is no statutory or regulatory authority for preventing a source from changing its major source status after the effective date of the NESHAP. In any event, Lehigh reserves the right to contest whether or not it can change its major source status after the effective date of the NESHAP.

Response #105

Section 112 of the Clean Air Act defines a "major source" as "any stationary source or group of stationary sources located within a contiguous area and under common control that emits or has the

potential to emit considering controls, in the aggregate, 10 tons per year or more of any HAP or 25 tons per year or more of any combination of HAPs..." Lehigh does not have any federally enforceable limits that reduce the potential to emit of any single HAP to below 10 tons per year and emissions of any combination of HAPs to below 25 tons per year; therefore, at this time, Lehigh is considered a "major source" as defined by Section 112 of the Clean Air Act.

EPA clarified in their May 16, 1995 memo titled "Potential to Emit for MACT Standards – Guidance on Timing Issues" that facilities may switch to area source status at any time until the "first compliance date" of the standard. The "first compliance date" is defined as the first date a source must comply with an emission limitation or other substantive regulatory requirement (i.e. work practice measures, housekeeping measures, etc..., but not a notice requirement) in the applicable MACT standard. By that date, to avoid being in violation, a major source must either comply with the standard, or obtain and comply with federally enforceable limits ensuring that actual and potential emissions (emphasis added) are below major source thresholds.⁴

The "first compliance date" for the NESHAP 40 CFR 63, Subpart LLL for Portland Cement Plants is June 14, 2002; therefore, if Lehigh wanted to switch to area source status in order to avoid the requirements of this MACT, Lehigh needed to obtain a permit with federally enforceable limits on HAPs emissions prior to June 14, 2002. Lehigh has not submitted an application requesting such limits.

For all of these reasons, IDEM believes the statement in the TSD is accurate. IDEM does agree that the statement does not negate Lehigh's right to contest whether it can change its major source status after the effective date of the NESHAP.

Comment #106

Appendix A: Emission Calculations
A. Quarry Activities

On page 2 of Appendix A, the potential to emit from storage emissions should be 0.65 lbs/hr instead of 0.10 lbs/hr.

Response #106

IDEM agrees. The requested change has been made.

Comment #107

Appendix A: Emission Calculations
C. Raw Material Storage and Handling Facilities

On page 4 of Appendix A, the potential to emit calculations for the shale crusher (EU09) and the raw material conveying system (EU10) need to be reversed.

Response #107

IDEM agrees. The emissions were miscalculated. The emission factor has not changed. The correction has been made.

Comment #108

Appendix A: Emission Calculations
C. Raw Material Storage and Handling Facilities

On page 5 of Appendix A, the potential to emit for the material storage building (F03) and the coal storage pile (F04) should be 0.21 lbs/hr instead of 1.93 lbs/hr.

Response #108

IDEM agrees that the calculation in Appendix A was incorrect. IDEM has revised the calculations. The emission factor for the outdoor storage emissions is 4.63 lb/acre/day. This emission factor results in potential emissions of 0.53 pounds per hour.

Comment #109

Appendix A: Emission Calculations
G. Cement Kiln Dust Storage and Handling

On page 8 of Appendix A, the allowable emissions from the CKD storage and handling should be 89.7 lbs/hr instead of 51.3 lbs/hr.

On page 9 of Appendix A, the potential to emit from the coal storage pile (F05) should be 0.06 lbs/hr instead of 0.01 lbs/hr.

Response #109

IDEM agrees. The requested changes have been made.

Comment #110

Appendix A: Emission Calculations
H. Clinker Handling

On page 11 of Appendix A, the potential to emit from the south clinker tower (EU27) should be 1.71 lbs/hr instead of 1.03 lbs/hr.

On page 12 of Appendix A, the potential to emit from the pan conveyor (EU29) should be 1.74 lbs/hr instead of 1.03 lbs/hr.

Response #110

IDEM agrees. The requested changes have been made.

Comment #111

Appendix A: Emission Calculations
K. Bulk Loading and Packaging

On page 15 of Appendix A, the potential to emit from the east truck vacuolader (EU42) should be 0.21 lbs/hr instead of 0.42 lbs/hr.

On page 16 of Appendix A, the potential to emit from the west truck vacuolader (EU44) should be 0.21 lbs/hr instead of 0.42 lbs/hr.

Response #111

IDEM agrees. The requested changes have been made.

On September 17, 2002, Debbie Tolliver, Lehigh Portland Cement Company, made the following additional comments on the proposed permit. A summary of the comments and IDEM OAQ's responses to those comments are as follows.

Comment #1

Condition A.2(a) - Replace "constructed prior to 1971" with "commencing prior to 1971" in the facility/emission unit description for the quarry activities.

Condition A.2(t) - Replace "constructed prior to 1971" with "storage commencing prior to 1971" in the facility/emission unit description for the coal pile.

Condition A.2(u) - Replace "constructed prior to 1971" with "storage commencing prior to 1971" in the facility/emission unit description for the raw material stockpiles.

Response #1

The requested changes have been made as shown below.

- (a) Drilling/blasting, hauling, handling and storage, identified as F01, **commenced** ~~constructed~~ prior to 1971, with associated fugitive particulate matter (PM) emissions.
- (t) One (1) coal pile, identified as F04, **storage commencing** ~~constructed~~ prior to 1971, with particulate matter emissions uncontrolled, and exhausting directly to the atmosphere.
- (u) Raw material stockpiles collectively, identified as F09, **storage commencing** ~~constructed~~ prior to 1971, used for temporary storage of various feed materials, including gypsum, foundry sand, mill scale, and slag, with particulate matter emissions uncontrolled, and exhausting to the atmosphere.

Comment #2

Condition A.2(v),(w) and (x) - To avoid confusing the coal stoker with the natural gas-fired burners, we suggest that each should have unique emission unit numbers. Please relabel the emission unit numbers for the coal stoker as "EU11B" and "EU12B." Additionally, since both the coal stoker and the natural gas-fired burners are designed to fuel the raw mills, both should either be described in Condition A.2(v) together as alternative operating scenarios or both should be described in the facility descriptions for the raw mills, Conditions A.2(w) and A.2(x), as alternative operating scenarios.

Response #2

IDEM has identified the coal stoker as emission units EU11B and EU12B in Sections A.2 and D.2 of the permit. Additionally, these identification numbers have been included elsewhere in the permit wherever the permit references the coal stoker. IDEM has not combined the descriptions of the coal stoker and the natural gas burners with the raw mill. IDEM believes the descriptions of these units make clear that

the coal stoker and the natural gas burners are both used to fire the raw mill. Therefore it is not necessary to combine them. Additionally, the permit includes different conditions for the natural gas burners and the coal stoker. The following changes have been made to the descriptions.

The raw mill facilities/emissions units, as follows:

- (v) One (1) coal-fired stoker for backup heat supply for the raw mills, **identified as EU11B and EU12B, constructed in 1977, with natural gas-fired burners installed in 1999, identified as EU11A and EU12A**, with a heat input rate of 37 million British thermal units (MMBtu) per hour, and exhausting to the raw mills. A bypass stack will be used during startup, shutdown, and malfunction periods.

Upon further review, IDEM decided to make the following revisions to the permit.

Revision #1

IDEM, OAQ has revised C.8 Asbestos Abatement Projects to clarify that the asbestos notification does not require a certification by the responsible official, but it does need to be certified by the owner or operator.

C.8 Asbestos Abatement Projects [326 IAC 14-10] [326 IAC 18] [40 CFR 61 Subpart M]

- (d) The notice to be submitted shall include the information enumerated in 326 IAC 14-10-3(3).

All required notifications shall be submitted to:

Indiana Department of Environmental Management
Asbestos Section, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

The notice shall include a signed certification from the owner or operator that the information provided in this notification is correct and that only Indiana licensed workers and project supervisors will be used to implement the asbestos removal project. The notifications do not require a certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

Revision #2

Condition C.18 has been changed to clarify that the documents required by this condition do require the certification by the responsible official.

C.18 Actions Related to Noncompliance Demonstrated by a Stack Test [326 IAC 2-7-5] [326 IAC 2-7-6]

- (a) When the results of a stack test performed in conformance with Section C - Performance Testing, of this permit exceed the level specified in any condition of this permit, the Permittee shall take appropriate response actions. Upon request, the Permittee shall submit a description of these response actions to IDEM, OAQ, within thirty (30) days of receipt of the test results. The Permittee shall take appropriate action to minimize excess emissions from the affected facility/emissions unit while the response actions are being

implemented.

- (b) A retest to demonstrate compliance shall be performed within one hundred twenty (120) days of receipt of the original test results. Should the Permittee demonstrate to IDEM, OAQ that retesting in one-hundred and twenty (120) days is not practicable, IDEM, OAQ may extend the retesting deadline.
- (c) IDEM, OAQ reserves the authority to take any actions allowed under law in response to noncompliant stack tests.

The documents submitted pursuant to this condition do not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

Revision #3

Lehigh is subject to the coal sampling and analysis methods as described in 326 IAC 3-7-2(b) because the total source coal-fired capacity is between 100 and 1500 million Btu per hour actual heat input. Therefore, Conditions D.2.9 and D.4.8 (re-numbered D.4.7) have been revised according to the requirements of 326 IAC 3-7-2(b). The revisions are shown below.

D.2.9 Sulfur Dioxide Emissions and Sulfur Content [326 IAC 2-7-5(A)] [326 IAC 2-7-6] [326 IAC 7-2]

Pursuant to 326 IAC 7-1.1-2, the Permittee shall demonstrate that the sulfur dioxide emissions from coal combustion do not exceed six (6.0) pounds per MMBtu. Pursuant to 326 IAC 7-2, compliance shall be determined utilizing the following methods:

- ~~(a) Providing vendor analysis of coal delivered, if accompanied by a certification from the fuel supplier as described under 40 CFR 60.48c(f)(3). The certification shall include:~~
 - ~~(1) The name of the coal supplier; and~~
 - ~~(2) The location of the coal when the sample was collected for analysis to determine the properties of the coal, specifically including whether the coal was sampled as delivered to the affected facility or whether the coal was collected from coal in storage at the mine, at a coal preparation plant, at a coal supplier's facility, or at another location. The certification shall include the name of the coal mine (and coal seam), coal storage facility, or coal preparation plant (where the sample was collected); and~~
 - ~~(3) The results of the analysis of the coal from which the shipment came (or of the shipment itself) including the sulfur content, moisture content, ash content, and heat content; and~~
 - ~~(4) The methods used to determine the properties of the coal; and~~

(b)(a) Coal sampling and analysis shall be performed using one of the following procedures:

- (1) Minimum Coal Sampling Requirements and Analysis Methods [326 IAC 3-7-2(b)(3)]:
 - (A) The coal sample acquisition point shall be at a location where representative samples of the total coal flow to be combusted by the facility or facilities may be obtained. A single as-bunkered or as-burned

sampling station may be used to represent the coal to be combusted by multiple facilities using the same stockpile feed system;

- (B) Coal shall be sampled at least three (3) times per day and at least one (1) time per eight (8) hour period unless no coal is bunkered during the preceding eight (8) hour period;
 - (C) Minimum sample size shall be five hundred (500) grams;
 - (D) Samples shall be composited and analyzed at the end of each calendar month;
 - (E) Preparation of the coal sample, heat content analysis, and sulfur content analysis shall be determined pursuant to 326 IAC 3-7-2(c), (d), (e); or
- (2) ~~Sample and analyze the coal pursuant to 236 IAC 3-7-3; or~~ Sample the coal pursuant to 326 IAC 3-7-2(a). Preparation of the coal sample, heat content analysis, and sulfur content analysis shall be determined pursuant to 326 IAC 3-7-2(c), (d) and (e);
- (3) **Sample and analyze the coal pursuant to 236 IAC 3-7-3.**

- (b) **Compliance may be determined by conducting a stack test for sulfur dioxide emissions from the boiler in accordance with 326 IAC 3-6, utilizing the procedures in 40 CFR 60, Appendix A, Method 6, 6A, 6C, or 8. [326 IAC 7-2-1(d)]**

A determination of noncompliance pursuant to either of the methods specified in (a) or (b) above shall not be refuted by evidence of compliance pursuant to the other method.

- (c) Upon written notification to IDEM by a facility owner or operator, continuous emission monitoring data collected and reported pursuant to 326 IAC 3-5-1 may be used as the means for determining compliance with the emission limitations in 326 IAC 7-2. Upon such notification, the other requirements of 326 IAC 7-2 shall not apply. [326 IAC 7-2-1(e)(g)]
- (d) ~~Compliance may also be determined by conducting a stack test for sulfur dioxide emissions from the kilns, using 40 CFR 60, Appendix A, Method 6 in accordance with the procedures in 326 IAC 3-6, which is conducted with such frequency as to generate the amount of information required by (a) or (b) above. [326 IAC 7-2-1(b)]~~

~~A determination of noncompliance pursuant to any of the methods specified in (a), (b), (c), or (d) above shall not be refuted by evidence of compliance pursuant to the other method.~~

~~326 IAC 7-2-1 is not federally enforceable.~~

D.4.7 Sulfur Dioxide Emissions from Coal Combustion and Coal Sulfur Content [326 IAC 2-7-5(A)]
[326 IAC 2-7-6] [326 IAC 7-1.1] [326 IAC 7-2]

Pursuant to 326 IAC 7-1.1-2, the Permittee shall demonstrate that the sulfur dioxide emissions from coal combustion do not exceed six (6.0) pounds per MMBtu. Pursuant to 326 IAC 7-2, compliance shall be determined utilizing the following methods:

- ~~(a) Providing vendor analysis of coal delivered, if accompanied by a certification from the fuel supplier as described under 40 CFR 60.48c(f)(3). The certification shall include:~~

- ~~_____ (1) The name of the coal supplier; and~~
- ~~_____ (2) The location of the coal when the sample was collected for analysis to determine the properties of the coal, specifically including whether the coal was sampled as delivered to the affected facility or whether the coal was collected from coal in storage at the mine, at a coal preparation plant, at a coal supplier's facility, or at another location. The certification shall include the name of the coal mine (and coal seam), coal storage facility, or coal preparation plant (where the sample was collected); and~~
- ~~_____ (3) The results of the analysis of the coal from which the shipment came (or of the shipment itself) including the sulfur content, moisture content, ash content, and heat content; and~~
- ~~_____ (4) The methods used to determine the properties of the coal; and~~

(b)(a) Coal sampling and analysis shall be performed using one of the following procedures:

- (1) Minimum Coal Sampling Requirements and Analysis Methods [326 IAC 3-7-2(b)(3)]:
 - (A) The coal sample acquisition point shall be at a location where representative samples of the total coal flow to be combusted by the facility or facilities may be obtained. A single as-bunkered or as-burned sampling station may be used to represent the coal to be combusted by multiple facilities using the same stockpile feed system;
 - (B) Coal shall be sampled at least three (3) times per day and at least one (1) time per eight (8) hour period unless no coal is bunkered during the preceding eight (8) hour period;
 - (C) Minimum sample size shall be five hundred (500) grams;
 - (D) Samples shall be composited and analyzed at the end of each calendar month;
 - (E) Preparation of the coal sample, heat content analysis, and sulfur content analysis shall be determined pursuant to 326 IAC 3-7-2(c), (d), (e); ~~or~~
- (2) ~~Sample and analyze the coal pursuant to 236 IAC 3-7-3; or~~ Sample the coal pursuant to 326 IAC 3-7-2(a). Preparation of the coal sample, heat content analysis, and sulfur content analysis shall be determined pursuant to 326 IAC 3-7-2(c), (d) and (e);
- (3) **Sample and analyze the coal pursuant to 236 IAC 3-7-3.**

(b) Compliance may be determined by conducting a stack test for sulfur dioxide emissions from the boiler in accordance with 326 IAC 3-6, utilizing the procedures in 40 CFR 60, Appendix A, Method 6, 6A, 6C, or 8. [326 IAC 7-2-1(d)]

A determination of noncompliance pursuant to either of the methods specified in (a) or (b) above shall not be refuted by evidence of compliance pursuant to the other method.

- (c) Upon written notification to IDEM by a facility owner or operator, continuous emission monitoring data collected and reported pursuant to 326 IAC 3-5-1 may be used as the means for determining compliance with the emission limitations in 326 IAC 7-2. Upon such notification, the other requirements of 326 IAC 7-2 shall not apply. [326 IAC 7-2-1(e)(g)]
- (d) ~~Compliance may also be determined by conducting a stack test for sulfur dioxide emissions from the kilns, using 40 CFR 60, Appendix A, Method 6 in accordance with the procedures in 326 IAC 3-6, which is conducted with such frequency as to generate the amount of information required by (a) or (b) above. [326 IAC 7-2-1(b)]~~

~~A determination of noncompliance pursuant to any of the methods specified in (a), (b), (c), or (d) above shall not be refuted by evidence of compliance pursuant to the other method.
326 IAC 7-2-1 is not federally enforceable.~~

Revision #4

IDEM has changed the requirements to perform baghouse inspections to indicate that the inspection shall be conducted during the last month of each quarter. Condition D.1.8 is shown below as an example.

D.1.8 Baghouse Inspections

An inspection shall be performed **during the last month of** each calendar quarter of all bags controlling the facilities/emissions units listed in this section. All defective bags shall be replaced.

Revision #5

The first sentence of the Quarterly Deviation and Compliance Monitoring Report has been deleted, because it made the report seem like a compliance certification. IDEM does not intend for this report to be a certification of compliance with all the requirements listed in the permit.

~~This report is an affirmation that the source has met all the requirements stated in this permit.~~

Revision #6

To be consistent with the new rule language for 326 IAC 6-3-2, the following changes have been made to Condition C.1.

C.1 Particulate Matter Emission Limitations For Processes with Process Weight Rates Less Than One Hundred (100) pounds per hour [326 IAC 6-3-2(e)]

-
- (a) Pursuant to ~~326 IAC 6-3-2~~ **40 CFR 52 Subpart P**, the allowable particulate emissions rate from any process not already regulated by 326 IAC 6-1 or any New Source Performance Standard and which has a maximum process weight rate less than 100 pounds per hour shall not exceed 0.551 pounds per hour.
 - (b) **Pursuant to 326 IAC 6-3-2(e)(2), the allowable particulate emissions rate from any process not exempt under 326 IAC 6-3-1(b) or (c) which has a maximum process weight rate less than 100 pounds per hour and the methods in 326 IAC 6-3-2(b) through (d) do not apply shall not exceed 0.551 pounds per hour. This condition is not federally enforceable.**

Revision #7

The following language was added to Condition C.10 (Compliance Requirements) to clarify that IDEM, OAQ will follow the requirements of 326 IAC 2-1.1-11 when issuing an order to stack test, monitor, or report that is not already required by the permit.

C.10 Compliance Requirements [326 IAC 2-1.1-11]

The commissioner may require stack testing, monitoring, or reporting at any time to assure compliance with all applicable requirements **by issuing an order under 326 IAC 2-1.1-11**. Any monitoring or testing shall be performed in accordance with 326 IAC 3 or other methods approved by the commissioner or the U. S. EPA.

Revision #8

In order to clarify the definition of “bag failure” and how a Permittee might detect such a situation, the following changes have been made to all conditions titled “Broken or Failed Bag Detection.” Condition D.5.12 is shown below as an example.

D.5.12 Broken or Failed Bag Detection

In the event that bag failure has been observed.

- (b) For single compartment baghouses, **if failure is indicated by a significant drop in the baghouse’s pressure readings with abnormal visible emissions or the failure is indicated by an opacity violation, or if bag failure is determined by other means, such as gas temperatures, flow rates, air infiltration, leaks, dust traces, or triboflows, then** failed units and the associated process will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).

Revision #9

The first box on the Emergency Occurrence Report form was revised to include the word “working” in order to be consistent with 326 IAC 2-7-16(b)(5) and the Emergency Provision.

This form consists of 2 pages

Page 1 of 2

- 9 This is an emergency as defined in 326 IAC 2-7-1(12)
- c The Permittee must notify the Office of Air Quality (OAQ), within four (4) business hours (1-800-451-6027 or 317-233-5674, ask for Compliance Section); and
 - c The Permittee must submit notice in writing or by facsimile within two (2) **working** days (Facsimile Number: 317-233-5967), and follow the other requirements of 326 IAC 2-7-16.

Indiana Department of Environmental Management Office of Air Quality

Technical Support Document (TSD) for a Part 70 Operating Permit

Source Background and Description

Source Name: Lehigh Portland Cement Company
Source Location: 121 North First Street, Mitchell, Indiana 47446
County: Lawrence
SIC Code: 3241
Operation Permit No.: T093-5990-00002
Permit Reviewer: Nisha Sizemore

The Office of Air Quality (OAQ) has reviewed a Part 70 permit application from Lehigh Portland Cement Company relating to the operation of a Portland cement manufacturing operation.

Permitted Emission Units and Pollution Control Equipment

The source consists of the following permitted emission units and pollution control devices:

The quarry activities, as follows:

- (a) Drilling/blasting, hauling, handling and storage, identified as F01, and associated fugitive particulate matter (PM) emissions.

The quarry material sizing facilities/emissions units, as follows:

- (b) One (1) primary crusher, identified as EU01, constructed in 1965, with a nominal rate of 975 tons per hour, with PM emissions controlled by one (1) baghouse, identified as QDC2, and exhausting to one (1) stack, identified as S-QDC2.
- (c) One (1) surge bin and transfer system, identified as EU02, constructed in 1965, with a nominal rate of 975 tons per hour, with PM emissions controlled by one (1) baghouse, identified as QDC3, and exhausting to one (1) stack, identified as S-QDC3.
- (d) One (1) secondary crusher, identified as EU03, constructed in 1965, with a nominal rate of 975 tons per hour, with PM emissions controlled by one (1) baghouse, identified as QDC4, and exhausting to one (1) stack, identified as S-QDC4.
- (e) One (1) tertiary crusher, identified as EU04, constructed in 1965, with a nominal rate of 975 tons per hour, with PM emissions controlled by one (1) baghouse, identified as QDC4, and exhausting to one (1) stack, identified as S-QDC4.
- (f) One (1) north screen house, identified as EU05, constructed in 1965, with a nominal rate of 975 tons per hour, with PM emissions controlled by one (1) baghouse, identified as QDC5, and exhausting to one (1) stack, identified as S-QDC5.
- (g) One (1) south screen house, identified as EU06, constructed in 1965, with a nominal rate of 975 tons per hour, with PM emissions controlled by one (1) baghouse, identified as QDC6, and exhausting to one (1) stack, identified as S-QDC6.

- (h) One (1) belt #7 to belt #8 conveyor transfer point, identified as EU07, constructed in 1965, with a nominal rate of 975 tons per hour, with PM emissions controlled by one (1) baghouse, identified as QDC7, and exhausting to one (1) stack, identified as S-QDC7.
- (i) One (1) belt #8 to belt #9 conveyor transfer point, identified as EU08, constructed in 1965, with a nominal rate of 975 tons per hour, with PM emissions controlled by one (1) baghouse, identified as QDC8, and exhausting to one (1) stack, identified as S-QDC8.
- (j) One (1) belt #9 to belt #10 conveyor transfer point, identified as F02, with a nominal rate of 975 tons per hour, using seasonal water suppression to control PM emissions, and exhausting directly to the atmosphere.

The cement kiln dust storage and handling facilities/emissions units, as follows:

- (k) One (1) cement kiln dust (CKD) bin, identified as EU24, constructed in 1959, with a nominal rate of 100 tons per hour, with PM emissions controlled by one (1) baghouse, identified as KDC7, and exhausting to one (1) stack, identified as S-KDC7.
- (l) One (1) CKD truck unloading system, identified as EU24A, with a nominal rate of 60 tons per hour, with PM emissions controlled by one (1) baghouse, identified as KDC7A, and exhausting to one (1) stack, identified as S-KDC7A.
- (m) One (1) mixer, identified as EU24B, with a nominal rate of 104 tons per hour, with PM emissions controlled by one (1) baghouse, identified as KDC7B, and exhausting to one (1) stack, identified as S-KDC7B.
- (n) One (1) truck loadout, identified as F07, with a nominal rate of 104 tons per hour, with PM emissions uncontrolled, and exhausting directly to the atmosphere.
- (o) A CKD storage area, identified as F05, with particulate matter emissions uncontrolled, and exhausting directly to the atmosphere.

The raw material handling and storage facilities/emissions units, as follows:

- (p) A conveying system to transport raw material to storage, identified as EU09, constructed in 1960, with a nominal rate of 200 tons per hour, with PM emissions controlled by one (1) baghouse, identified as RMDC1, and exhausting to one (1) stack, identified as S-RMDC1.
- (q) One (1) shale crusher, identified as EU10, constructed in 1961, with a nominal rate of 200 tons per hour, with PM emissions controlled by one (1) baghouse, identified as RMDC2, and exhausting to one (1) stack, identified as S-RMDC2.
- (r) One (1) material storage building, identified as F03, with fugitive emissions from various conveyors and storage piles controlled by partial enclosure and exhausting directly to the atmosphere.
- (s) One (1) coal pile, identified as F04, with particulate matter emissions uncontrolled, and exhausting directly to the atmosphere.

The raw mill facilities/emissions units, as follows:

- (t) One (1) coal-fired stoker for backup heat supply for the raw mills, with a heat input rate of 37 million British thermal units (MMBtu) per hour, and exhausting to the raw mills. A bypass stack will be used during startup, shutdown, and malfunction periods.

- (u) One (1) raw mill #1, identified as EU11, constructed in 1961, with a nominal rate of 100 tons per hour and including a natural gas-fired burner, identified as EU11A, with a maximum heat input rate of 20 million British thermal units (MMBtu) per hour, with PM emissions controlled by one (1) baghouse, identified as RMDC3, and exhausting to one (1) stack, identified as S-RMDC3.
- (v) One (1) raw mill #2, identified as EU12, constructed in 1961, with a nominal rate of 100 tons per hour and including a natural gas-fired burner, identified as EU12A, with a maximum heat input rate of 20 million British thermal units (MMBtu) per hour, with PM emissions controlled by one (1) baghouse, identified as RMDC4, and exhausting to one (1) stack, identified as S-RMDC4.

The raw mill storage facilities/emissions units, as follows:

- (w) Blending bins, identified as EU13, constructed in 1961, with a combined nominal rate of 250 tons per hour, with PM emissions controlled by two (2) baghouses, identified as RMDC5 and RMDC6, and each exhausting to separate stacks, identified as S-RMDC5 and S-RMDC6, respectively.
- (x) Kiln supply silos, identified as EU14, constructed in 1961, with a combined nominal rate of 250 tons per hour, with PM emissions controlled by two (2) baghouses, identified as RMDC7 and RMDC8, and each exhausting to separate stacks, identified as S-RMDC7 and S-RMDC8, respectively.
- (y) One (1) kiln feed bin #1, identified as EU18, constructed in 1959, with a nominal rate of 66 tons per hour, with PM emissions controlled by one (1) baghouse, identified as KDC1, and exhausting to one (1) stack, identified as S-KDC1.
- (z) One (1) kiln feed bin #2, identified as EU20, constructed in 1959, with a nominal rate of 66 tons per hour, with PM emissions controlled by one (1) baghouse, identified as KDC3, and exhausting to one (1) stack, identified as S-KDC3.
- (aa) One (1) kiln feed bin #3, identified as EU22, constructed in 1974, with a nominal rate of 73 tons per hour, with PM emissions controlled by one (1) baghouse, identified as KDC5, and exhausting to one (1) stack, identified as S-KDC5.

The clinker handling facilities/emissions units, as follows:

- (bb) One (1) south storage drag, identified as EU25, constructed in 1974, with a nominal rate of 120 tons per hour, with PM emissions controlled by one (1) baghouse, identified as FDC1, and exhausting to one (1) stack, identified as S-FDC1.
- (cc) One (1) north clinker tower, identified as EU26a, constructed in 1959, with a nominal rate of 120 tons per hour, with PM emissions controlled by one (1) baghouse, identified as FDC2, and exhausting to one (1) stack, identified as S-FDC2.
- (dd) One (1) North storage drag, identified as EU26b, with a nominal rate of 120 tons per hour, with PM emissions controlled by one (1) baghouse, identified as FDC2, and exhausting to one (1) stack, identified as S-FDC2.
- (ee) One (1) scrap bin clinker ladder, identified as EU26c, with a nominal rate of 120 tons per hour, with PM emissions controlled by one (1) baghouse, identified as FDC2, and exhausting to one (1) stack, identified as S-FDC2.
- (ff) One (1) south clinker tower, identified as EU27, constructed in 1974, with a nominal rate

of 120 tons per hour, with PM emissions controlled by one (1) baghouse, identified as FDC3, and exhausting to one (1) stack, identified as S-FDC3.

- (gg) One (1) hot spout clinker ladder, identified as EU28, constructed in 1993, with a nominal rate of 120 tons per hour, with PM emissions controlled by one (1) baghouse, identified as FDC4, and exhausting to one (1) stack, identified as S-FDC4.
- (hh) One (1) east clinker ladder, identified as EU30, constructed in 1993, with a nominal rate of 120 tons per hour, with PM emissions controlled by one (1) baghouse, identified as FDC6, and exhausting to one (1) stack, identified as S-FDC6.
- (ii) One (1) roll crusher, identified as EU31, constructed in 1987, with a nominal rate of 240 tons per hour, with PM emissions controlled by one (1) baghouse, identified as FDC7, and exhausting to one (1) stack, identified as S-FDC7.

Note: The scrap bin clinker ladder (EU26c), the hot spout clinker ladder (EU28), and the east clinker ladder (EU30) are not emission units; they are flaps which are used to reduce the drop heights from conveyor transfer points, which reduces particulate emissions.

The finish mill facilities/emissions units, as follows:

- (jj) One (1) finish mill #1 with associated feed bin, identified as EU32, constructed in 1959, with a nominal rate of 37 tons per hour, with PM emissions controlled by one (1) baghouse, identified as FDC8, and exhausting to one (1) stack, identified as S-FDC8.
- (kk) One (1) finish mill #2 with associated feed bin, identified as EU33, constructed in 1959, with a nominal rate of 37 tons per hour, with PM emissions controlled by one (1) baghouse, identified as FDC9, and exhausting to one (1) stack, identified as S-FDC9.
- (ll) One (1) finish mill #3 with associated feed bin, identified as EU34, constructed in 1959, with a nominal rate of 37 tons per hour, with PM emissions controlled by one (1) baghouse, identified as FDC10, and exhausting to one (1) stack, identified as S-FDC10.
- (mm) One (1) finish mill #4 with associated feed bin, identified as EU35, constructed in 1974, with a nominal rate of 50 tons per hour, with PM emissions controlled by one (1) baghouse, identified as FDC11, and exhausting to one (1) stack, identified as S-FDC11.
- (nn) One (1) finish mill #4 separator, identified as EU36, constructed in 1989, with a nominal rate of 50 tons per hour, with PM emissions controlled by one (1) baghouse, identified as FDC12, and exhausting to one (1) stack, identified as S-FDC12.
- (oo) One (1) lime bin, identified as EU38, constructed in 1993, with a nominal rate of 6 tons per hour, with PM emissions controlled by one (1) baghouse, identified as FDC14, and exhausting to one (1) stack, identified as S-FDC14.

The finish material storage facilities/emissions units, as follows:

- (pp) One (1) surge bin, identified as EU37, constructed in 1959, with a nominal rate of 35 tons per hour, with PM emissions controlled by one (1) baghouse, identified as FDC13, and exhausting to one (1) stack, identified as S-FDC13.
- (qq) A north and south silo operation consisting of thirty (30) storage silos, identified as EU39A and EU39B, constructed in 1959, with a nominal rate of 60 tons per hour, with PM emissions controlled by two (2) baghouses, identified as SDC1 and SDC2, and

exhausting to two (2) stacks, identified as S-SDC1 and S-SDC2, respectively.

- (rr) A silo transfer system, identified as EU40A and EU40B, constructed in 1984, with a nominal rate of 300 tons per hour, with PM emissions controlled by two (2) baghouses, identified as SDC3 and SDC4, and exhausting to two (2) stacks, identified as S-SDC3 and S-SDC4, respectively.

The bulk loading and packaging facilities/emissions units, as follows:

- (ss) One (1) east truck loadout bin, identified as EU41, with a nominal rate of 450 tons per hour, with PM emissions controlled by one (1) baghouse, identified as SDC5, and exhausting to one (1) stack, identified as S-SDC5.
- (tt) One (1) east truck vacuolader, identified as EU42, constructed in 1985, with a nominal rate of 450 tons per hour, with PM emissions controlled by one (1) baghouse, identified as SDC6, and exhausting to one (1) stack, identified as S-SDC6.
- (uu) One (1) west truck loadout bin, identified as EU43, constructed in 1985, with a nominal rate of 450 tons per hour, with PM emissions controlled by one (1) baghouse, identified as SDC7, and exhausting to one (1) stack, identified as S-SDC7.
- (vv) One (1) west truck vacuolader, identified as EU44, constructed in 1985, with a nominal rate of 450 tons per hour, with PM emissions controlled by one (1) baghouse, identified as SDC8, and exhausting to one (1) stack, identified as S-SDC8.
- (ww) One (1) truck loadout station, identified as F06, with a nominal rate of 30 tons per hour, and exhausting directly to the atmosphere.
- (xx) One (1) railroad loadout bin, identified as EU45, constructed in 1987, with a nominal rate of 240 tons per hour, with PM emissions controlled by one (1) baghouse, identified as SDC9, and exhausting to one (1) stack, identified as S-SDC9.
- (yy) One (1) articuloader, identified as EU46, constructed in 1987, with a nominal rate of 240 tons per hour, with PM emissions controlled by one (1) baghouse, identified as SDC10, and exhausting to one (1) stack, identified as S-SDC10.

The kiln facilities/emissions units, as follows:

- (zz) One (1) kiln #1, identified as EU15, constructed in 1959, with a heat input rate of 118 million Btu per hour, with a nominal production rate of 38 tons per hour, with PM emissions controlled by one (1) electrostatic precipitator (ESP), identified as KP1, and exhausting to one (1) stack, identified as S-KP1. Kiln #1 is also permitted to use a blended fuel of coal and pressed paper making waste where the blend has a maximum of 20% pressed paper making waste by heat input.
- (aaa) One (1) kiln #2, identified as EU16, constructed in 1959, with a heat input rate of 118 million Btu per hour, with a nominal production rate of 38 tons per hour, with PM emissions controlled by one (1) electrostatic precipitator (ESP), identified as KP2, and exhausting to one (1) stack, identified as S-KP1. Kiln #2 is also permitted to use a blended fuel of coal and pressed paper making waste where the blend has a maximum of 20% pressed paper making waste by heat input.
- (bbb) One (1) kiln #3, identified as EU17, constructed in 1974, with a heat input rate of 118 million Btu per hour, with a nominal production rate of 43 tons per hour, with PM emissions controlled by one (1) electrostatic precipitator (ESP), identified as KP3, and exhausting to one (1) stack, identified as S-KP2. Kiln #3 is also permitted to use a

blended fuel of coal and pressed paper making waste where the blend has a maximum of 20% pressed paper making waste by heat input.

The clinker cooler facilities/emissions units, as follows:

- (ccc) One (1) clinker cooler #1, identified as EU19, constructed in 1959, with a nominal rate of 38 tons per hour, with PM emissions controlled by one (1) baghouse, identified as KDC2, and exhausting to one (1) stack, identified as S-KDC2.
- (ddd) One (1) clinker cooler #2, identified as EU21, constructed in 1959, with a nominal rate of 38 tons per hour, with PM emissions controlled by one (1) baghouse, identified as KDC4, and exhausting to one (1) stack, identified as S-KDC4.
- (eee) One (1) clinker cooler #3, identified as EU23, constructed in 1974, with a nominal rate of 43 tons per hour, with PM emissions controlled by one (1) baghouse, identified as KDC6, and exhausting to one (1) stack, identified as S-KDC6.

Unpermitted Emission Units and Pollution Control Equipment

The source also consists of the following unpermitted facilities/units:

- (a) One (1) pan clinker conveyor, identified as EU29, with a nominal rate of 120 tons per hour, with PM emissions controlled by one (1) baghouse, identified as FDC5, and exhausting to one (1) stack, identified as S-FDC5. (Part of the clinker handling facilities)
- (b) One (1) packing machine, identified as EU47, with a nominal rate of 40 tons per hour, with PM emissions controlled by two (2) baghouses, identified as SDC11 and SDC12, and exhausting to two (2) stacks, identified as S-SDC11 and S-SDC12, respectively. (Part of the bulk loading facilities)

Emission Units and Pollution Control Equipment

There are no new facilities to be reviewed.

Insignificant Activities

The source also consists of the following insignificant activities, as defined in 326 IAC 2-7-1(21):

- (1) Space heaters, process heaters, or boilers using the following fuels:
 - (A) Natural gas-fired combustion sources with heat input equal to or less than ten million (10,000,000) Btu per hour.
 - (B) Fuel oil-fired combustion sources with heat input equal to or less than two million (2,000,000) Btu per hour and firing fuel containing less than five-tenths (0.5) percent sulfur by weight.
- (2) A gasoline fuel transfer and dispensing operation handling less than or equal to 1,300 gallons per day, such as filling of tanks, locomotives, automobiles, having a storage capacity less than or equal to 10,500 gallons.
- (3) The following VOC and HAP storage containers:

- (A) Storage tanks with capacity less than or equal to 1,000 gallons and annual throughput less than 12,000 gallons.
 - (B) Vessels storing lubricating oils, hydraulic oils, machining oils, and machining fluids.
- (4) Refractory storage not requiring air pollution control equipment.
- (5) Application of oils, greases, lubricants, or other nonvolatile materials applied as temporary protective coatings.
- (6) Degreasing operations that do not exceed 145 gallons per 12 months, except if subject to 326 IAC 20-6.
- (7) Replacement or repair of electrostatic precipitators, bags in baghouses and filters in other air filtration equipment.
- (8) Heat exchanger cleaning and repair.
- (9) Paved and unpaved roads and parking lots with public access.
- (10) Underground conveyors with PM controlled by total enclosure.
- (11) On-site fire and emergency response training approved by the department.
- (12) Emergency generators as follows:
 - (A) Gasoline generators not exceeding 110 horsepower.
 - (B) Diesel generators not exceeding 1600 horsepower.
- (13) Stationary fire pumps.
- (14) A laboratory as defined in 326 IAC 2-7-1 (21)(D).
- (15) Other categories with emissions below insignificant thresholds as follows:
 - (A) Two (2) grinding aid storage tanks.
 - (B) Three (3) Airalon/Airplas storage tanks.
 - (C) Portable welding.
 - (D) Refractory work.
 - (E) Three (3) coal mills, with nominal rates of 5, 6, and 6 tons per hour, with particulate matter controlled by total enclosure.

Existing Approvals

The source has been operating under the following approvals:

- (1) OP 47-01-88-0072, issued on May 30, 1984.

- (2) OP 47-01-88-0073, issued on May 30, 1984.
- (3) OP 47-01-88-0074, issued on May 30, 1984.
- (4) OP 47-01-88-0075, issued on May 30, 1984.
- (5) OP 47-01-88-0076, issued on May 30, 1984.
- (6) OP 47-01-88-0077, issued on May 30, 1984.
- (7) OP 47-01-88-0078, issued on May 30, 1984.
- (8) OP 47-01-88-0079, issued on May 30, 1984.
- (9) OP 47-01-88-0080, issued on May 30, 1984.
- (10) OP 47-01-92-0097, issued on July 22, 1987.
- (11) OP 47-04-92-0099, issued on March 30, 1988.
- (12) CP 093-2770-00002, issued on March 3, 1993.
- (13) CP 093-4598-00002, issued on February 27, 1998. Note: This permit has been revoked.
- (14) Administrative Amendment 093-9623-00002, issued on April 29, 1998.
- (15) Minor Source Modification 093-10597-00002, issued on March 1, 1999.
- (16) Exemption 093-9431-00002, issued August 19, 1999.
- (17) Administrative Amendment 093-11248-00002, issued on September 9, 1999.
- (18) Minor Source Modification 093-11313-00002, issued on November 9, 1999.
- (19) Administrative Amendment 093-11552-00002, issued October 23, 2000.
- (20) Exemption 093-12881-00002, issued March 20, 2001.

All conditions from previous approvals were incorporated into this Part 70 permit except the following:

- (1) CP 093-2770-00002, issued on March 3, 1993

Operation Condition 4:

That pursuant to the New Source Performance Standards, 326 IAC 12 (40 CFR 60.60 through 60.66) Subpart F, "Standards of Performance for Portland Cement Plants", visible emissions from the hydrated lime feed system and the clinker ladders shall not exceed 10% opacity (40 CFR 60.62(c)).

Reason not incorporated:

Upon further review, it has been determined that the three clinker ladders which were permitted in CP 093-2770-00002 were updates to existing drop points which

reduced emissions. Therefore, they were not "modifications" as defined in 40 CFR 60.14. The limit will remain for the hydrated lime feed system.

- (2) Construction Permit CP 093-4598, issued February 27, 1998, which allowed the source to burn waste tires as a fuel in their kilns, was revoked on June 14, 2001. The source is no longer permitted to burn waste tires.

Enforcement Issue

- (a) IDEM is aware that the following equipment has been constructed and operated prior to receipt of the proper permit:
 - (1) One (1) pan clinker conveyor, identified as EU29, with a nominal rate of 100 tons per hour, using one (1) baghouse to control PM emissions, and exhausting to one (1) stack, identified as FDC5.
 - (2) One (1) packing machine, identified as EU47, with a nominal rate of 40 tons per hour, using two (2) baghouses to control PM emissions, and exhausting to two (2) stacks, identified as SDC11 and SDC12.
- (b) IDEM is reviewing this matter and will take appropriate action. This proposed permit is intended to satisfy the requirements of the construction permit rules.
- (c) The source has enforcement case numbers 2000-9035-A and 2000-9695-A pending for alleged violations of 326 IAC 5-1 (Opacity Limitations) on December 31, 1999.
- (d) The source has enforcement case number 2001-10399-A pending for alleged violations of 326 IAC 3 (Monitoring) on December 31, 2000.

Recommendation

The staff recommends to the Commissioner that the Part 70 permit be approved. This recommendation is based on the following facts and conditions:

Unless otherwise stated, information used in this review was derived from the application and additional information submitted by the applicant.

An administratively complete Part 70 permit application for the purposes of this review was received on May 31, 1996. Additional information was received on December 10, 1996, August 10, 1998, August 28, 1998, October 20, 1998, February 22, 1999, and May 3, 1999. Other additional information has also been provided through verbal communication and through e-mails.

Emission Calculations

See Appendix A of this document for detailed emissions calculations.

Potential Emissions

Pursuant to 326 IAC 1-2-55, Potential Emissions are defined as "emissions of any one (1) pollutant which would be emitted from a facility, if that facility were operated without the use of pollution control equipment unless such control equipment is necessary for the facility to produce its normal product or is integral to the normal operation of the facility."

Pollutant	Potential Emissions (tons/year)
PM	greater than 250
PM-10	greater than 250
SO ₂	greater than 250
VOC	less than 100
CO	greater than 100, less than 250
NO _x	greater than 250

Note: For the purpose of determining Title V applicability for particulates, PM-10, not PM, is the regulated pollutant in consideration.

HAP's	Potential Emissions (tons/year)
Arsenic compounds	less than 10
Benzene	less than 10
Beryllium compounds	less than 10
Biphenyl	less than 10
Bis(2-ethylhexyl)phthalate	less than 10
Bromomethane	less than 10
Cadmium compounds	less than 10
Carbon disulfide	less than 10
Chlorobenzene	less than 10
Chloromethane	less than 10
Chromium compounds	less than 10
Di-n-butylphthalate	less than 10
Ethylbenzene	less than 10
Formaldehyde	less than 10
Hydrogen chloride	greater than 10
Lead compounds	less than 10
Manganese compounds	less than 10
Methyl ethyl ketone	less than 10
Methylene chloride	less than 10
Mercury compounds	less than 10
Naphthalene	less than 10
Phenol	less than 10
Selenium compounds	less than 10
Styrene	less than 10
Toluene	less than 10
Total PCDF	less than 10
Total TCDF	less than 10
Xylenes	less than 10
TOTAL	greater than 25

Note: The emissions for HAPs were determined through use of AP-42 emission factors. The emission factors are based on controlled emissions. Potential emissions may be greater than those stated above.

- (a) The potential emissions (as defined in the Indiana Rule) of PM₁₀, CO, NO_x, and SO₂ are equal to or greater than 100 tons per year. Therefore, the source is subject to the provisions of 326 IAC 2-7.
- (b) The potential emissions (as defined in Indiana Rule) of any single HAP are equal to or greater than ten (10) tons per year and the potential emissions (as defined in Indiana Rule) of a combination HAPs are greater than or equal to twenty-five (25) tons per year.

Therefore, the source is subject to the provisions of 326 IAC 2-7.

(c) Fugitive Emissions

Since this type of operation is one of the twenty-eight (28) listed source categories under 326 IAC 2-2 and since there are applicable New Source Performance Standards that were in effect on August 7, 1980, the fugitive emissions are counted toward determination of PSD and Emission Offset applicability.

Actual Emissions

The following table shows the actual emissions from the source. This information reflects 1999 emission data.

Pollutant	Actual Emissions (tons/year)
PM	493
PM-10	493
SO ₂	3638
VOC	7
CO	35
NO _x	2937
HAPs	no data

County Attainment Status

The source is located in Lawrence County.

Pollutant	Status
PM-10	Attainment or Unclassifiable
SO ₂	Attainment or Unclassifiable
Ozone	Attainment or Unclassifiable
CO	Attainment or Unclassifiable
Lead	Attainment or Unclassifiable

Volatile organic compounds (VOC) and oxides of nitrogen (NO_x) are precursors for the formation of ozone. Therefore, VOC and NO_x emissions are considered when evaluating the rule applicability relating to the ozone standards. Lawrence County has been designated as attainment or unclassifiable for ozone.

Part 70 Permit Conditions

This source is subject to the requirements of 326 IAC 2-7, pursuant to which the source has to meet the following:

- (1) Emission limitations and standards, including those operational requirements and limitations that assure compliance with all applicable requirements at the time of issuance of Part 70 permits.
- (2) Monitoring and related record keeping requirements which assume that all reasonable information is provided to evaluate continuous compliance with the applicable requirements.

Federal Rule Applicability

40 CFR 60.250 Subpart Y (Standards of Performance for Coal Preparation Plants)

The coal mills at this source meet the definition of a coal preparation plant because they do pulverize coal. The coal mills are completely enclosed and emissions are routed through the kilns. Since emissions from the coal mills are routed through the kilns, and not discharged directly to the atmosphere, the coal mills are not subject to the NSPS for Coal Preparation Plants (40 CFR 60 Subpart Y).

40 CFR 60, Subpart F (Performance Standards for Portland Cement Plants)

The following affected facilities at Lehigh Portland Cement Company are subject to the requirements of the New Source Performance Standard, 326 IAC 12, (40 CFR 60.60, Subpart F) because they were either constructed or modified after the applicability date of August 17, 1971:

- (1) Kiln Feed Bin #3 (EU22) - Constructed in 1974.
- (2) Kiln #3 (EU17) - Constructed in 1974.
- (3) Clinker Cooler #3 (EU23) - Constructed in 1974.
- (4) South Clinker Tower (EU27) - Constructed in 1974.
- (5) Roll Crusher (EU31) - Constructed in 1987.
- (6) Finish Mill #4 and associated Feed Bin #4 (EU35) - Constructed in 1974.
- (7) Finish Mill Separator (EU36)
- (8) Lime Bin (EU38) - Constructed in 1993.
- (9) Cement Packing Machine (EU47) - Constructed in 1984.

The following facilities that were altered after August 17, 1971, were not considered modifications for the purpose of Subpart F:

- (1) South Storage Drag (EU25) - Although the South Storage Drag (SSD) was constructed in 1974, which is after the applicability date of August 17, 1971, conveyors are not considered affected facilities for the purposes of Subpart F. Subpart F considers the conveyor transfer points the affected facilities. Since the SSD replaced an existing conveyor, the transfer points already existed. Since baghouses were added to the transfer points, emissions did not increase due to this change. Therefore, no modification occurred due to this addition.
- (2) Pan Conveyor - Although the pan conveyor was constructed in 1979, which is after the applicability date of August 17, 1971, conveyors are not considered affected facilities for the purposes of Subpart F. Subpart F considers the conveyor transfer points the affected facilities. Since the pan conveyor replaced an existing conveyor, the transfer points already existed. Since baghouses were added to the transfer points, emissions did not increase due to this change. Therefore, for the purposes of NSPS applicability, no modification occurred due to this addition.
- (3) Finish Material Storage and Bulk Loadout - Subpart F does not apply to these facilities, which include the north and south silos, silo transfer system, east truck loadout bin and vaculoader, west truck loadout bin and vaculoader, and the railroad loadout bin and articuloader, because based on information from the source, the only modifications to these systems made after August 17, 1971 was the addition of baghouses which reduced PM emissions.
- (4) Raw mills #1 and #2 - The natural gas-fired burners (EU11A and EU12A) shall not operate at the same time as the existing 37 million Btu per hour coal-fired stoker. Therefore, there is no emissions increase for the system and the requirements of 326 IAC 12 (New Source Performance Standards) and 40 CFR Part 60, Subpart F, will not

apply.

- (5) The three (3) clinker ladders (hot spout clinker ladder, east clinker ladder, and scrap bin clinker ladder) are not subject to the requirements of Subpart F, because the ladders are not conveyor transfer points and they are not emission units. The ladders are "flaps" which were installed to reduce the drop height from transfer points, thus resulting in reduced emissions. Therefore, these ladders are not affected facilities, and are not subject to Subpart F.
- (6) The rest of the facilities at Lehigh Portland Cement Company are not subject to the New Source Performance Standard, 326 IAC 12, (40 CFR 60.60, Subpart F) because they were not constructed and have not been modified since the applicability date of August 17, 1971.

The affected facilities listed in 40 CFR Part 60, Subpart F, are required to comply with the following standards:

- (1) The kiln shall be limited to 0.30 pound per ton of feed (dry basis) to the kiln and 20% opacity. Compliance with this limit shall also satisfy the requirements of 326 IAC 6-3-2 (Process Operations).
- (2) The clinker cooler shall be limited to 0.10 pound per ton of feed (dry basis) to the kiln and 10% opacity. Compliance with this limit shall also satisfy the requirements of 326 IAC 6-3-2 (Process Operations).
- (3) All other affected facilities shall be limited to 10% opacity.
- (4) Pursuant to 40 CFR 60.64, the Permittee shall perform PM testing on the kiln(s) and clinker cooler #3 utilizing Methods 5 or 17 (40 CFR 60, Appendix A), or other methods as approved by the Commissioner.
- (5) Pursuant to 40 CFR Parts 60.63(a), the daily production rates and kiln feed rates shall be recorded.
- (6) Pursuant to 40 CFR Parts 60.63, a continuous opacity monitor shall be installed, calibrated, maintained, and operated for the kiln(s), and for clinker cooler #3.
- (7) Pursuant to 40 CFR 60.65, the Permittee shall submit a semiannual continuous monitoring system (CMS) performance report with the excess opacity summaries, in accordance with 40 CFR 60.7(c).

40 CFR 60, Subpart OOO (Performance Standards for Nonmetallic Mineral Processing Plants)

None of the facilities at Lehigh Portland Cement are subject to the New Source Performance Standard 326 IAC 12, 40 CFR 60.670 (Subpart OOO) because they were constructed prior the applicability date of August 31, 1983 or they are subject to 40 CFR 60.60 (Subpart F), or they follow in the plant process a facility that is subject to Subpart F.

40 CFR 60, Subparts K and Ka (Performance Standards for Petroleum Storage Tanks)

None of the petroleum storage tanks at Lehigh Portland Cement are subject to the New Source Performance Standard 326 IAC 12, 40 CFR 60.110 (Subpart K), or 40 CFR 60.110a (Subpart Ka) because all petroleum storage tanks have capacities less than 40,000 gallons.

40 CFR 60, Subpart Kb (Performance Standards for Volatile Organic Liquid Storage Tanks)

None of the storage tanks at Lehigh Portland Cement are subject to the New Source Performance Standard 326 IAC 12, 40 CFR 60.110b (Subpart Kb) because the tanks have capacities less than 10,500 gallons, or do not contain a substance categorized as a volatile organic liquid (VOL).

40 CFR 60.730 Subpart UUU (Standards of Performance for Calciners and Dryers in Mineral Industries)

None of the facilities listed in this permit are subject to the requirements of the NSPS 326 IAC 12, 40 CFR 60.730 (Subpart UUU) because the source does not fit the definition of a mineral processing plant.

40 CFR 63.460 Subpart T (NESHAP for Halogenated Solvent Degreasers)

The parts washers constructed in 1991 are not subject to the requirements of the National Emissions Standards for Hazardous Air Pollutants (NESHAP) 326 IAC 20-1, 40 CFR 63.460 (Subpart T) because they do not utilize a solvent containing methylene chloride, perchloroethylene, trichloroethylene, 1,1,1-trichloroethane, carbon tetrachloride, or chloroform, or any combination of these halogens, in a total concentration greater than five percent by weight.

40 CFR 63 (National Emission Standards for Hazardous Air Pollutants)

- (1) None of the quarry facilities/emission units or quarry material sizing facilities/emission units listed in this section are subject to the requirements of the National Emissions Standards for Hazardous Air Pollutants (NESHAP) 40 CFR 63 Subparts A and LLL, because they are not affected facilities under this rule. These facilities/emission units precede the raw material storage, which is just prior to the raw mill, in the sequence of materials handling operations. The rule specifically states that for portland cement plants with on-site nonmetallic mineral processing facilities, the first affected source in the sequence of materials handling operations subject to the rule is the raw material storage, which is just prior to the raw mill. The rule states that the primary and secondary crushers and any other equipment of the on-site nonmetallic mineral processing plant which precedes the raw material storage are not subject to this rule. Furthermore, the rule states that the first conveyor transfer point subject to this rule is the transfer point associated with the conveyor transferring material from the raw material storage to the raw mill.
- (2) None of the cement kiln dust storage and handling facilities/emission units (EU24, EU24A, EU24B, F07, and F05) listed in this section are subject to the requirements of the National Emissions Standards for Hazardous Air Pollutants (NESHAP) 40 CFR 63 Subparts A and LLL, because they are not considered affected facilities under this rule.
- (3) The conveying system (EU09), the shale crusher (EU10), and the coal pile (F04) are not subject to the requirements of the National Emissions Standards for Hazardous Air Pollutants (NESHAP) 40 CFR 63 Subparts A and LLL, because all of the facilities/emission units listed in this section precede the raw material storage, which is just prior to the raw mill, in the sequence of materials handling operations. The rule specifically states that for portland cement plants with on-site nonmetallic mineral processing facilities, the first affected source in the sequence of materials handling operations subject to the rule is the raw material storage, which is just prior to the raw mill. The rule states that the primary and secondary crushers and any other equipment of the on-site nonmetallic mineral processing plant which precedes the raw material storage are not subject to this rule. Furthermore, the rule states that the first conveyor transfer point subject to this rule is the transfer point associated with the conveyor transferring material from the raw material storage to the raw mill.

The remaining facilities at Lehigh, listed as "Permitted Emission Units and Pollution Control Equipment" in this TSD, are subject to the requirements of 40 CFR 63, Subpart LLL (National

Emission Standards for Hazardous Air Pollutants (NESHAP) from the Portland Cement Manufacturing Industry).

The initial notification submitted to the U.S. EPA, pursuant to 40 CFR 63.1353(b)(1) by the Permittee indicated that the source is a major source (as defined at 40 CFR 63.2) for the purposes of the NESHAP. However, since the notification was not based on compliance determination testing, but rather was based on existing data and the design and operation of the facility, the Permittee may notify OAQ of the change in its status in the event that more accurate information acquired in the future, such as stack testing, indicates that the source is not a major source, but is rather an area source pursuant to the NESHAP.

However, once the source has operated as a major source after the effective date of the NESHAP, the source may not change its status after the effective date of the NESHAP in order to render the requirements of the NESHAP not applicable to the source.

A summary of the applicable requirements is as follows:

- (1) Pursuant to this rule the provisions of 40 CFR Part 63, Subpart A - General Provisions, which are incorporated by reference in 326 IAC 20-1, apply except when otherwise specified in 40 CFR Part 63, Subpart LLL.
- (2) Pursuant to this rule the following conditions shall apply to the kilns (EU 15, EU16, and EU17):
 - (a) Pursuant to 40 CFR 63.1348 (Emissions Standards and Operating Limits), on and after June 10, 2002, which is the compliance date for the National Emission Standards for Hazardous Air Pollutants (NESHAP) from the Portland Cement Manufacturing Industry, the kilns shall be limited as follows:
 - (I) Particulate matter (PM) emissions shall be limited to 0.30 pound per ton of feed (dry basis) to the kilns.
 - (II) Visible emissions shall be limited to twenty percent (20%) opacity.
 - (III) Dioxin/Furan emissions shall be limited to 8.7×10^{-11} grains per dry standard cubic foot (TEQ) corrected to seven percent oxygen; or 1.7×10^{-10} grains per dry standard cubic foot (TEQ) corrected to seven percent oxygen, when the average of the performance test run average temperatures at the inlet to the particulate matter control device is 400 degrees Fahrenheit or less.
 - (IV) The kilns shall be operated such that the temperature of the gas at the inlet to the kiln's particulate matter control device does not exceed the average of the run average temperatures determined during the performance tests.

Compliance with the PM limitation in (I) shall be deemed compliance with the requirements of 326 IAC 6-3.
 - (b) Pursuant to 40 CFR 63.1349, within 180 days after June 10, 2002, which is the compliance date for the Portland Cement Manufacturing Industry NESHAP, the Permittee shall demonstrate initial compliance with the PM, opacity and dioxin/furan limits by conducting performance tests in accordance with 40 CFR 63.1349 and Methods 5, 9 and 23 of 40 CFR Part 60, Appendix A, respectively.

- (c) Pursuant to 40 CFR 63.1349, compliance with the applicable PM and dioxin/furan limitations shall be determined by performance tests once every 2 ½ years. The Permittee shall perform PM testing utilizing Method 5 (40 CFR 60, Appendix A), or other methods as approved by the Commissioner. PM and dioxin/furan tests shall be performed during combustion of the fuel that results in the greatest emission rate. The performance tests shall dictate whether the cyclical testing is performed while the kiln is combusting coal or coal with whole waste tires. During each stack test, the following items shall be performed:
 - (I) Certified continuous opacity monitoring (COM) data shall be observed and recorded or EPA Method 9 opacity tests shall be performed.
 - (II) The kiln temperature and oxygen concentration shall be measured and recorded.
 - (III) The clinker production rate shall be measured and recorded. The kiln must be operating at 95 percent of its maximum production capacity or more during the performance tests to be considered a valid test.
 - (IV) If testing is performed during the combustion of coal with whole waste tires, the weight of whole waste tires added to the kiln during the performance tests shall be measured and recorded. The weight of the whole waste tires shall be used to calculate the heat input from the whole waste tires. The heat input from the whole waste tires during the performance tests must be at least 95 percent of the maximum capacity allowed.
 - (V) If testing is performed during the combustion of coal with whole waste tires, the temperature at the inlet of the ESP shall be measured and recorded during the dioxin/furan compliance test.
- (d) Pursuant to 40 CFR Part 63.1350, a continuous opacity monitor shall be installed, calibrated, maintained, and operated for each kiln.
- (e) Pursuant to 40 CFR 63.1350 (Monitoring Requirements), on and after June 10, 2002, which is the compliance date for the National Emission Standards for Hazardous Air Pollutants (NESHAP) for the Portland Cement Manufacturing Industry, the Permittee shall perform the following monitoring requirements:
 - (I) The Permittee shall have prepared a written operations and maintenance plan for the kilns. The plan shall include the following information:
 - (A) Procedures for proper operation and maintenance of the kilns and associated air pollution control device(s) in order to meet the emissions limits; and
 - (B) Procedures to be used during an inspection of the components of the combustion system of the kilns at least once per year.
 - Failure to comply with any provision of the operations and maintenance plan shall be a violation of the standard.
 - (II) The Permittee shall conduct an inspection of the components of the combustion system of kilns at least once per year.

- (III) The Permittee shall continuously monitor opacity of emissions at the outlet of the PM control device. The COM shall be used to monitor opacity emissions in accordance with the NESHAP and shall be installed, maintained, calibrated and operated as required by 40 CFR 63, Subpart A and according to 40 CFR 60, Appendix B, PS-1.
- (IV) The Permittee shall install, calibrate, maintain, and continuously operate a continuous monitor to record the temperature of the exhaust gases from the kilns at the inlet to, or upstream of the kiln's PM control device. The monitor shall comply with the following:
 - (A) The recorder response range must include zero and 1.5 times either of the average temperatures established according to the requirements in 40 CFR 63.1349(b)(3)(iv).
 - (B) The reference method must be a National Institute of Standards and Technology calibrated reference thermocouple-potentiometer system or alternate reference, subject to approval by the Administrator.
 - (C) The three-hour rolling average temperature shall be calculated as the average of 180 successive one-minute average temperatures.
 - (D) Periods of time when one-minute averages are not available shall be ignored when calculating three-hour rolling averages. When one-minute averages become available, the first one-minute average is added to the previous 179 values to calculate the three-hour rolling average.
 - (E) The calibration of all thermocouples and other temperature sensors shall be verified at least once every three months.
- (V) The Permittee shall install, calibrate, maintain and operate a particulate matter continuous emission monitoring system (PM CEMS) to measure the particulate matter discharged to the atmosphere. The compliance deadline for installing the PM CEMS and all requirements relating to performance of the PM CEMS and implementation of the PM CEMS requirement is deferred pending further rulemaking.
- (f) Pursuant to 40 CFR 63.1354, beginning June 10, 2002, the Permittee shall submit a continuous monitoring system (CMS) performance report with the excess opacity summaries, in accordance with 40 CFR 63.1354(8) and 40 CFR 63, Subpart A.
- (g) Pursuant to 40 CFR 63.1354, beginning June 10, 2002, the Permittee shall submit a semi-annual summary report which contains the information specified in 40 CFR 63.10(e)(3)(vi), as well as the following:
 - (I) All exceedances of maximum control device inlet gas temperature limits.
 - (II) All failures to calibrate thermocouples and other temperature sensors as required under 40 CFR 63.1350(f)(7).
 - (III) The results of any combustion system component inspections conducted within the reporting period.

- (IV) All failures to comply with any provision of the operation and maintenance plan developed in accordance with 40 CFR 63.1350(a).

If the total continuous monitoring system (CMS) downtime for any CEM or any CMS for the reporting period is ten percent or greater of the total operating time for the reporting period, the Permittee shall submit an excess emissions and CMS performance report along with the summary report.

- (h) Pursuant to 40 CFR 63.1354, the Permittee shall report the information required by 40 CFR 63.1354, including, but not limited to the following:
 - (I) The operations and maintenance plan shall be submitted to IDEM, OAQ and U.S. EPA by June 10, 2002, which is the compliance date for the National Emission Standards for Hazardous Air Pollutants (NESHAP) from the Portland Cement Manufacturing Industry.
 - (II) As required by 40 CFR 63.10(d)(2), the Permittee shall report the results of performance tests.
 - (III) As required by 40 CFR 63.10(d)(3), the Permittee shall report the opacity results from tests required by 40 CFR 63.1349.
 - (IV) As required by 40 CFR 63.10(d)(5), if actions taken by the Permittee during a startup, shutdown, or malfunction of an affected source (including actions taken to correct a malfunction) are consistent with the procedures specified in the source's startup, shutdown, and malfunction plan specified in 40 CFR 63.6(e)(3), the Permittee shall state such information in a semiannual report. Reports shall only be required if a startup, shutdown, or malfunction occurred during the reporting period. The startup, shutdown, and malfunction report may be submitted simultaneously with the excess emissions and continuous monitoring system performance reports.
 - (V) Pursuant to 40 CFR 63.10(d)(5)(ii), any time an action taken by the Permittee during a startup, shutdown, or malfunction (including actions taken to correct a malfunction) is not consistent with the procedures in the startup, shutdown, and malfunction plan, the Permittee shall report the actions taken for that event within 2 working days after commencing actions inconsistent with the plan, by telephone call or facsimile (FAX) transmission. The immediate report shall be followed by a letter within 7 working days after the end of the event, certified by the Permittee, explaining the circumstances of the event, the reasons for not following the startup, shutdown, and malfunction plan, and whether any excess emissions and/or parameter monitoring exceedances are believed to have occurred.
- (3) Pursuant to this rule the following conditions shall apply to the clinker coolers (EU19, EU21, and EU23):
 - (a) Pursuant to 40 CFR 63.1348 (Emissions Standards and Operating Limits), on and after June 10, 2002, which is the compliance date for the National Emission Standards for Hazardous Air Pollutants (NESHAP) from the Portland Cement Manufacturing Industry, each clinker cooler (EU19, EU21 and EU23) shall be limited as follows:

(I) Particulate matter (PM) emissions shall be limited to 0.10 pound per ton of feed (dry basis) to the kiln.

(II) Visible emissions shall be limited to ten percent (10%) opacity.

Compliance with the PM limitation in (a) shall be deemed compliance with the requirements of 326 IAC 6-3.

- (b) Pursuant to 40 CFR 63.1349, within 180 days after June 10, 2002, which is the compliance date for the Portland Cement Manufacturing Industry NESHAP, the Permittee shall demonstrate initial compliance with the PM and opacity limits by conducting performance tests in accordance with 40 CFR 63.1349 and Methods 5 and 9 of 40 CFR Part 60, Appendix A, respectively.
- (c) Pursuant to 40 CFR 63.1349, compliance with the applicable PM limitations shall be determined by performance tests once every 2 ½ years, conducted in accordance with Section C - Performance Testing. The Permittee shall perform PM testing utilizing Method 5 (40 CFR 60, Appendix A), or other methods as approved by the Commissioner.
- (d) Pursuant to 40 CFR 63.1350 (Monitoring Requirements), on and after June 10, 2002, which is the compliance date for the National Emission Standards for Hazardous Air Pollutants (NESHAP) from the Portland Cement Manufacturing Industry, the Permittee shall perform the following monitoring requirements:
 - (I) The Permittee shall have prepared a written operations and maintenance plan for the clinker coolers (EU19, EU21 and EU23). The plan shall include the procedures for proper operation and maintenance of the clinker coolers (EU19, EU21 and EU23) and associated air pollution control device(s) in order to meet the emissions limit. Failure to comply with any provision of the operations and maintenance plan shall be a violation of the standard.
 - (II) The Permittee shall continuously monitor opacity of emissions at the outlet of the PM control device. The COM shall be used to monitor opacity emissions in accordance with the NESHAP and shall be installed, maintained, calibrated and operated as required by 40 CFR 63, Subpart A and according to 40 CFR 60, Appendix B, PS-1.
- (e) Pursuant to 40 CFR 63.1354, beginning June 10, 2002, the Permittee shall submit a continuous monitoring system (CMS) performance report with the excess opacity summaries, in accordance with 40 CFR 63.1354(8) and 40 CFR 63, Subpart A.
- (f) Pursuant to 40 CFR 63.1354, beginning June 10, 2002, the Permittee shall submit a semi-annual summary report which contains the information specified in 40 CFR 63.10(e)(3)(vi), as well as all failures to comply with any provision of the operation and maintenance plan developed in accordance with 40 CFR 63.1350(a). If the total continuous monitoring system (CMS) downtime for any CEM or any CMS for the reporting period is ten percent or greater of the total operating time for the reporting period, the Permittee shall submit an excess emissions and CMS performance report along with the summary report.
- (g) Pursuant to 40 CFR 63.1354, the Permittee shall report the information required by 40 CFR 63.1354, including, but not limited to the following:

- (I) The operations and maintenance plan shall be submitted to IDEM, OAQ and U.S. EPA by June 10, 2002, which is the compliance date for the National Emission Standards for Hazardous Air Pollutants (NESHAP) from the Portland Cement Manufacturing Industry.
 - (II) As required by 40 CFR 63.10(d)(2), the Permittee shall report the results of performance tests.
 - (III) As required by 40 CFR 63.10(d)(3), the Permittee shall report the opacity results from tests required by 40 CFR 63.1349.
 - (IV) As required by 40 CFR 63.10(d)(5), if actions taken by the Permittee during a startup, shutdown, or malfunction of an affected source (including actions taken to correct a malfunction) are consistent with the procedures specified in the source's startup, shutdown, and malfunction plan specified in 40 CFR 63.6(e)(3), the Permittee shall state such information in a semiannual report. Reports shall only be required if a startup, shutdown, or malfunction occurred during the reporting period. The startup, shutdown, and malfunction report may be submitted simultaneously with the excess emissions and continuous monitoring system performance reports.
 - (V) Pursuant to 40 CFR 63.10(d)(5)(ii), any time an action taken by the Permittee during a startup, shutdown, or malfunction (including actions taken to correct a malfunction) is not consistent with the procedures in the startup, shutdown, and malfunction plan, the Permittee shall report the actions taken for that event within 2 working days after commencing actions inconsistent with the plan, by telephone call or facsimile (FAX) transmission. The immediate report shall be followed by a letter within 7 working days after the end of the event, certified by the Permittee, explaining the circumstances of the event, the reasons for not following the startup, shutdown, and malfunction plan, and whether any excess emissions and/or parameter monitoring exceedances are believed to have occurred.
- (4) Pursuant to this rule the following conditions shall apply to the remaining affected facilities:
- (a) The visible emissions from each facility shall not exceed ten percent (10%) opacity.
 - (b) Pursuant to 40 CFR 63.1350 (Monitoring Requirements), the Permittee shall prepare a written operations and maintenance plan for the affected facilities/emission units by June 10, 2002, which is the compliance date for the National Emission Standards for Hazardous Air Pollutants (NESHAP) from the Portland Cement Manufacturing Industry. The plan shall include the following information:
 - (I) Procedures for proper operation and maintenance of the material storage building (F03) and associated air pollution control device(s) in order to meet the applicable emissions limits; and
 - (II) Procedures to be used to periodically monitor the material storage building (F03), which is subject to opacity standards under 40 CFR 63.1348. Such procedures must include the following provisions:

- (1) The Permittee shall conduct a monthly 1-minute visible emissions test of each affected source in accordance with 40 CFR 60, Appendix A, Method 22. The test must be conducted while the affected source is in operation.
- (2) If no visible emissions are observed in six consecutive monthly tests for any affected source, the Permittee may decrease the frequency of testing from monthly to semi-annually for that affected source. If visible emissions are observed during any semi-annual test, the Permittee shall resume testing of that affected source on a monthly basis and maintain that schedule until no visible emissions are observed in six consecutive monthly tests.
- (3) If no visible emissions are observed during the semi-annual test for any affected source, the Permittee may decrease the frequency of testing from semi-annually to annually for that affected source. If visible emissions are observed during any annual test, the Permittee shall resume testing of that affected source on a monthly basis and maintain that schedule until no visible emissions are observed in six consecutive monthly tests.
- (4) If visible emissions are observed during any Method 22 test, the Permittee must conduct a 6-minute test of opacity in accordance with 40 CFR 60, Appendix A, Method 9. The Method 9 test must begin within one hour of any observation of visible emissions. The test must be conducted while the affected source is in operation.

(III) Corrective actions to be taken when required by paragraph (2)(c).

Failure to comply with any provision of the operations and maintenance plan shall be a violation of the standard.

- (c) Pursuant to 40 CFR 63.1350 (Monitoring Requirements), the Permittee shall monitor opacity from the raw mills (EU11, EU11A, EU12, and EU12A) and finish mills (EU32 through EU36) by conducting daily visual emissions observations of the mill sweep and air separator particulate matter control devices (PMCDs), in accordance with the procedures of 40 CFR 60, Appendix A, Method 22. The Method 22 test shall be conducted while the affected source is operating at the highest load or capacity level reasonably expected to occur within the day. The duration of the Method 22 test shall be six minutes. If visible emissions are observed during any Method 22 visible emissions test, the Permittee must:
 - (I) Initiate, within one (1) hour, the corrective actions specified in the site specific operations and maintenance plan developed in accordance with 40 CFR 63.1350(a)(1) and (a)(2); and
 - (II) Within 24 hours of the end of the Method 22 test in which the visible emissions were observed, conduct a visual opacity test of each stack from which visible emissions were observed, in accordance with 40 CFR 60, Appendix A, Method 9. The duration of the Method 9 test shall be thirty minutes.
- (d) To document compliance with the NESHAP, the Permittee shall report the information required by 40 CFR 63.1354, including, but not limited to the

following:

- (I) The operations and maintenance plan shall be submitted to IDEM, OAQ and U.S. EPA by June 10, 2002, which is the compliance date for the National Emission Standards for Hazardous Air Pollutants (NESHAP) from the Portland Cement Manufacturing Industry.
- (II) As required by 40 CFR 63.10(d)(2), the Permittee shall report the results of performance tests as part of the notification of compliance status.
- (III) As required by 40 CFR 63.10(d)(3), the Permittee shall report the opacity results from tests required by 40 CFR 63.1349.
- (IV) As required by 40 CFR 63.10(d)(5), if actions taken by the Permittee during a startup, shutdown, or malfunction of an affected source (including actions taken to correct a malfunction) are consistent with the procedures specified in the source's startup, shutdown, and malfunction plan specified in 40 CFR 63.6(e)(3), the Permittee shall state such information in a semiannual report. Reports shall only be required if a startup, shutdown, or malfunction occurred during the reporting period. The startup, shutdown, and malfunction report may be submitted simultaneously with the excess emissions and continuous monitoring system performance reports.
- (V) Pursuant to 40 CFR 63.10(d)(5)(ii), any time an action taken by the Permittee during a startup, shutdown, or malfunction (including actions taken to correct a malfunction) is not consistent with the procedures in the startup, shutdown, and malfunction plan, the Permittee shall report the actions taken for that event within 2 working days after commencing actions inconsistent with the plan, by telephone call or facsimile (FAX) transmission. The immediate report shall be followed by a letter within 7 working days after the end of the event, certified by the Permittee, explaining the circumstances of the event, the reasons for not following the startup, shutdown, and malfunction plan, and whether any excess emissions and/or parameter monitoring exceedances are believed to have occurred.

State Rule Applicability - Entire Source

326 IAC 2-2 (Prevention of Significant Deterioration)

Pursuant to 326 IAC 2-2 (Prevention of Significant Deterioration) and 40 CFR 52.21, this source is a major source because it is one of the 28 listed source categories (portland cement plant) and the potential to emit of at least one criteria pollutant is greater than 100 tons per year.

The following tables show modifications made to this source, by year. The tables show the PTE for each facility. Then the tables show the necessary emission limits to render the requirements of 326 IAC 2-2 (PSD) not applicable. There is a separate table for each modification. Following each table is a list of conditions necessary to render the requirements of 326 IAC 2-2 (PSD) not applicable.

1979 Modification

Facility	PTE after controls		Limits necessary to render PSD not applicable	
	PM		PM	
	(lbs/hr)	(tons/yr)	(lbs/hr)	(tons/yr)
pan clinker conveyor (EU29)	1.74	7.63	5.48	24
Total	1.74	7.63	5.48	24

326 IAC 2-2 (Prevention of Significant Deterioration (PSD))

In order to render the requirements of 326 IAC 2-2 (PSD) not applicable, the PM emissions from the baghouse FDC5 controlling the pan clinker conveyor (EU29) shall not exceed 5.48 pounds per hour. Therefore, the requirements of 326 IAC 2-2 (PSD) and 40 CFR 52.21 shall not apply.

Note: PM10 was not a regulated pollutant until February 5, 1989. Since this modification occurred prior to that date, no PM10 limit is necessary.

1984 Modification

Facility	PTE after controls		Limits necessary to render PSD not applicable	
	PM		PM	
	(lbs/hr)	(tons/yr)	(lbs/hr)	(tons/yr)
packing machine (EU47)	1.79	7.83	3.39	14.85
silos transfer system (EU40A and EU40B)	1.10	4.82	2.09	9.15
Total	2.89	12.65	5.48	24

326 IAC 2-2 (Prevention of Significant Deterioration (PSD))

In order to render the requirements of 326 IAC 2-2 (PSD) not applicable, the following conditions shall apply:

- (a) The PM emissions from the baghouses SDC11 and SDC12 controlling the packing machine (EU47) shall not exceed 3.39 pounds per hour.
- (b) The PM emissions from the baghouses SDC3 and SDC4 controlling the silos transfer system (EU40A and EU40B) shall not exceed 2.09 pounds per hour.

Therefore, the requirements of 326 IAC 2-2 (PSD) and 40 CFR 52.21 shall not apply.

Note: PM10 was not a regulated pollutant until February 5, 1989. Since this modification occurred prior to that date, no PM10 limit is necessary.

1985 Modification

Facility	PTE after controls		Limits necessary to render PSD not applicable	
	PM		PM	
	(lbs/hr)	(tons/yr)	(lbs/hr)	(tons/yr)
east truck vacuolader (EU42)	0.42	1.84	1.827	8
west truck vacuolader (EU43)	0.42	1.84	1.827	8
west truck vacuolader (EU44)	0.42	1.84	1.827	8
Total	1.26	5.52	5.48	24

326 IAC 2-2 (Prevention of Significant Deterioration (PSD))

In order to render the requirements of 326 IAC 2-2 (PSD) not applicable, the following conditions shall apply:

- (a) The PM emissions from the baghouse SDC6 controlling the east truck vacuolader (EU42) shall not exceed 1.827 pounds per hour.
- (b) The PM emissions from the baghouse SDC7 controlling the west truck vacuolader (EU43) shall not exceed 1.827 pounds per hour.
- (c) The PM emissions from the baghouse SDC8 controlling the west truck vacuolader (EU44) shall not exceed 1.827 pounds per hour.

Therefore, the requirements of 326 IAC 2-2 (PSD) and 40 CFR 52.21 shall not apply.

Note: PM10 was not a regulated pollutant until February 5, 1989. Since this modification occurred prior to that date, no PM10 limit is necessary.

1987 Modification

Facility	PTE		Limits necessary to render PSD not applicable	
	PM		PM	
	(lbs/hr)	(tons/yr)	(lbs/hr)	(tons/yr)
roll crusher (EU31)	1.89	8.28	3.71	16.25
articulolader (EU46)	0.21	0.92	0.41	1.80
railroad loadout bin (EU45)	0.69	3.02	1.36	5.95
Total	2.79	12.22	5.48	24

326 IAC 2-2 (Prevention of Significant Deterioration (PSD))

In order to render the requirements of 326 IAC 2-2 (PSD) not applicable, the following conditions shall apply:

- (a) The PM emissions from the baghouse FDC7 controlling the roll crusher (EU31) shall not exceed 3.71 pounds per hour.
- (b) The PM emissions from the baghouse SDC10 controlling the articuloader (EU46) shall not exceed 0.41 pounds per hour.
- (c) The PM emissions from the baghouse SDC9 controlling the railroad loadout bin (EU45) shall not exceed 1.36 pounds per hour.

Therefore, the requirements of 326 IAC 2-2 (PSD) and 40 CFR 52.21 shall not apply.

Note: PM10 was not a regulated pollutant until February 5, 1989. Since this modification occurred prior to that date, no PM10 limit is necessary.

1989 Modification

Facility	PTE after controls		Limits necessary to render PSD not applicable			
	PM/PM10		PM		PM10	
	(lbs/hr)	(tons/yr)	(lbs/hr)	(tons/yr)	(lbs/hr)	(tons/yr)
finish mill #4 separator (EU36)	6.69	29.30	5.48	24	3.20	14
Total	6.69	29.30	5.48	24	3.20	14

326 IAC 2-2 (Prevention of Significant Deterioration (PSD))

In order to render the requirements of 326 IAC 2-2 (PSD) not applicable, the following conditions shall apply:

- (a) The PM emissions from the baghouse FDC12 controlling the finish mill #4 separator (EU36) shall not exceed 5.48 pounds per hour.
- (b) The PM10 emissions from the baghouse FDC12 controlling the finish mill #4 separator (EU36) shall not exceed 3.20 pounds per hour.

Therefore, the requirements of 326 IAC 2-2 (PSD) and 40 CFR 52.21 shall not apply. Since calculations indicate the finish mill #4 separator is not in compliance with these limits, stack testing will be required to demonstrate compliance.

1993 Modification

Facility	PTE after controls		Limits necessary to render PSD not applicable			
	PM/PM10		PM		PM10	
	(lbs/hr)	(tons/yr)	(lbs/hr)	(tons/yr)	(lbs/hr)	(tons/yr)
lime bin (EU38)	0.21	0.92	5.48	24	3.20	14
Total	0.21	0.92	5.48	24	3.20	14

326 IAC 2-2 (Prevention of Significant Deterioration (PSD))

In order to render the requirements of 326 IAC 2-2 (PSD) not applicable, the following conditions shall apply:

- (a) The PM emissions from the baghouse FDC14 controlling the lime bin (EU38) shall not exceed 5.48 pounds per hour.
- (b) The PM10 emissions from the baghouse FDC14 controlling the lime bin (EU38) shall not exceed 3.20 pounds per hour.

Therefore, the requirements of 326 IAC 2-2 (PSD) and 40 CFR 52.21 shall not apply.

1999 Modification

Facility	PTE		Limits necessary to render PSD not applicable			
	PM	PM10	PM		PM10	
	(tons/yr)	(tons/yr)	(lbs/hr)	(tons/yr)	(lbs/hr)	(tons/yr)
mixer	unknown	unknown				
truck loadout	unknown	unknown				
Total			5.48	24	3.20	14

326 IAC 2-2 (Prevention of Significant Deterioration (PSD))

In order to render the requirements of 326 IAC 2-2 (PSD) not applicable, the following conditions shall apply:

- (a) The combined PM emissions from the mixer (EU24B) and the truck loadout (F07) shall not exceed 5.48 pounds per hour.
- (b) The combined PM10 emissions from the mixer (EU24B) and the truck loadout (F07) shall not exceed 3.20 pounds per hour.

Therefore, the requirements of 326 IAC 2-2 (PSD) and 40 CFR 52.21 shall not apply.

326 IAC 2-6 (Emission Reporting)

This source is subject to 326 IAC 2-6 (Emission Reporting), because it has the potential to emit more than one hundred (100) tons per year of PM₁₀, SO₂, CO, and NO_x. Pursuant to this rule, the owner/operator of the source must annually submit an emission statement for the source. The annual statement must be received by July 1 of each year and contain the minimum requirement

as specified in 326 IAC 2-6-4. The submittal should cover the period defined in 326 IAC 2-6-2(8) (Emission Statement Operating Year).

326 IAC 4-1 (Open Burning)

The Permittee shall not open burn any material except as provided in 326 IAC 4-1-3, 326 IAC 4-1-4 or 326 IAC 4-1-6. The previous sentence notwithstanding, the Permittee may open burn in accordance with an open burning approval issued by the Commissioner under 326 IAC 4-1-4.1.

326 IAC 5-1 (Opacity Limitations)

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Alternative Opacity Limitations), opacity shall meet the following, unless otherwise stated in this permit:

- (a) Opacity shall not exceed an average of forty percent (40%) in any one (1) six (6) minute averaging period, as determined in 326 IAC 5-1-4.
- (b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

326 IAC 6-4 (Fugitive Dust Emissions)

The Permittee shall not allow fugitive dust to escape beyond the property line or boundaries of the property, right-of-way, or easement on which the source is located, in a manner that would violate 326 IAC 6-4 (Fugitive Dust Emissions).

State Rule Applicability - Significant Activities

326 IAC 6-3-2 (Process Operations)

Pursuant to Lehigh's current permits and 326 IAC 6-3-2 (Process Operations), the particulate matter (PM) emissions from the various processes shall not exceed an amount determined by the appropriate equation specified below. Lehigh's previous permits did not specify the exact limits pursuant to this rule, nor did they explain which facilities/emission units were considered to be one "process" pursuant to the rule. Therefore, it is necessary to make such determinations prior to calculating the limits.

First a determination of what constitutes a process must be made. The definition of process in 326 IAC 1-2-58 is "any action, operation, or treatment and the equipment used in connection therewith, and all methods or forms of manufacturing or processing that may emit air contaminants. As stated, this definition could lead to an interpretation that the manufacturing of Portland cement from start to finish could be considered a process. However, the IDEM, OAQ has historically viewed processes as groups of equipment that are physically connected and perform a similar function (i.e. the storage or handling of material). In making the determination, the definition for process weight rate in 326 IAC 1-2-59 was relied upon when more than one interpretation could be made. The last paragraph of the definition states: "When the nature of any process or operation or the design of any is such as to permit more than one interpretation for this definition, the interpretation that results in the minimum value for allowable emission shall apply. The determinations were made as follows:

- (1) The quarry material sizing equipment, including the primary crusher (EU01), surge bin and transfer system (EU02), secondary crusher (EU03), tertiary crusher (EU04), north screen house (EU05), south screen house (EU06), and conveyor transfer points #7 to #8, #8 to #9 and #9 to #10 (EU07, EU08 and F02) were grouped together as one process because they operate in sequence, are dependent on each other and are used to accomplish one goal, being the sizing and preparation of the quarried material.

- (2) The conveyor transfer system (EU09) was considered its own process because it operates independently and is not physically connected to any other of the other raw material sizing equipment.
- (3) The shale crusher (EU10) was considered its own process because it operates independently and is not physically connected to any other of the raw material sizing equipment.
- (4) Although the raw mills #1 and #2 (EU11, EU11A, EU12, and EU12A) perform similar functions, they are operate independently such as to allow each mill to produce a slightly different milled raw material and are not physically connected to each other. Therefore, they were considered separate processes.
- (5) The raw mill's output is stored and prepared for charging to the kilns in various bins and silos including the blending bins (EU13), kiln supply silos (EU14) and kiln feed bins (EU18, EU20 and EU22). These emissions units were grouped together because they operate dependently in sequence and are used to accomplish one goal, intermediate preparation and storage of milled raw material before being sent to the kilns.
- (6) Although the kilns (EU15, EU16 and EU17) perform similar functions, they are operated independently such as to allow each kiln to produce a slightly different grade of cement and are not physically connected to each other. Therefore, they were considered separate processes.
- (7) The cement kiln dust storage and handling (EU24, EU24A, and EU24B) were grouped together because they are operate in sequence, are dependent on each other, and are used to accomplish one goal, being the removal of cement kiln dust from the baghouse.
- (8) Although the clinker coolers (EU19, EU21 and EU23) perform similar functions, they are operated independently and are not physically connected to each other. Therefore, they were considered separate processes.
- (9) The clinker exiting the coolers is transferred to the finish mills via several conveyors and ladders, including the south storage drag (EU25), north clinker tower (EU26a) and scrap bin clinker tower (EU26b), south clinker tower (EU27), and the pan conveyor (EU29). These facilities were grouped together because they are interconnected facilities that have one specific function which is to transfer clinker from the coolers to the finish mill system.
- (10) The roll crusher (EU31) was considered its own process because it operates somewhat independently of the clinker handling equipment and performs a separate function which is to size the clinker.
- (11) Although the finish mills #1 through #4 (EU32, EU33, EU34 and EU35) perform similar functions, they are operated independently such as to allow each finish mill to produce a slightly different grade of cement and are not physically connected to each other. Therefore, they were considered separate processes. However the separator (EU36) and finish mill #4 (EU35) were grouped together because they are physically connected and do not operate independently.
- (12) The surge bin (EU37), silo operations (EU39A and EU39B) and the silo transfers (EU40A and EU40B) were grouped together because they are physically connected, are operated dependently in sequence, and are used to accomplish the same goal, which is storage and transfer of finish material to the loading facilities.
- (13) The east truck loadout (EU41) and vaculoader (EU42) were grouped together as one

process because they are physically connected, operate dependently, and are used to accomplish the same goal, which is the loading of cement to trucks.

- (14) The west truck loadout (EU43) and vaculoader (EU44) were also grouped together as one process because they are physically connected, operate dependently, and are used to accomplish the same goal, which is the loading of cement to trucks. However, they were not grouped with the east truck loadout and vaculoader because the east and west truck loadout systems can operate independently.
- (15) The railroad loadout (EU45) and articuloader (EU46) were grouped together as one process because they are physically connected, operate dependently, and are used to accomplish the same goal, which is the loading of cement to rail cars. However, they were not grouped with the east or west truck loadouts and vaculoaders because they can operate independently from the truck loadout systems.
- (16) The packing machine (EU47) was considered its own process because it is not physically connected to the other loadout facilities and it operates independently to perform a separate function.

The limitations for these facilities were calculated using the following equations

- (1) All facilities, except for kilns #1 and #2 (EU15 and EU16) were calculated by the following equation:

Interpolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$$E = 4.10 P^{0.67} \quad \text{where } E = \text{rate of emission in pounds per hour and} \\ P = \text{process weight rate in tons per hour}$$

or

Interpolation and extrapolation of the data for the process weight rate in excess of sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$$E = 55.0 P^{0.11} - 40 \quad \text{where } E = \text{rate of emission in pounds per hour and} \\ P = \text{process weight rate in tons per hour}$$

- (2) The limitations for kilns #1 and 2 (EU15 and EU16) were calculated by the following equation, since they were constructed prior to 1968:

$$E = 15.0 P^{0.50} \quad \text{where } E = \text{rate of emission in pounds per hour and} \\ P = \text{process weight rate in tons per hour}$$

Note: kiln #3 was constructed after 1968 so the limit for kiln #3 was calculated using the equation listed in (1) above.

Therefore the limits for the various facilities are as follows:

Processes	Units	Process Weight Rate (P)	Allowable Emissions (E)
Quarry Material Sizing	EU01 through EU08 and F02	975	77.3 or 0.1 lbs/1000 lbs of gases
Raw Material Conveyor	EU09	200	58.5
Shale Crushing	EU10	200	58.5
Raw Mill #1	EU11, EU11A	100	51.3
Raw Mill #2	EU12, EU12A	100	51.3
Raw Mill Storage	EU13, EU14, EU18, EU20 and EU22	250	61.0 or 0.1 lbs/1000 lbs of gases
Kiln #1	EU15	38	92
Kiln #2	EU16	38	92
Kiln #3 ¹	EU17	43	43
Clinker Cooler #1	EU19	38	42
Clinker Cooler #2	EU21	38	42
Clinker Cooler #3 (see footnote #1)	EU23	43	43
Cement Kiln Dust Storage and Handling	EU24, EU24A, EU24B	100	51.3
Clinker Handling	EU25, EU26a, EU26b, EU27, and EU29	120	53.1
Roll Crusher	EU31	240	60.5 or 0.1 lbs/1000 lbs of gases
Finish Mill #1	EU32	37	42
Finish Mill #2	EU33	37	42
Finish Mill #3	EU34	37	42
Finish Mill #4 and Finish Mill #4 Separator	EU35, EU36	50	45
Lime Bin	EU38	1.5	5.4

¹

326 IAC 6-3-2 is not applicable to facilities which have a PM limit already established by a NSPS. The clinker cooler #3 and kiln #3 both have PM limitations pursuant to the NSPS Subpart F. Therefore, the limits pursuant to 326 IAC 6-3-2 does not currently apply to clinker cooler #3 and kiln #3. However, after June 10, 2002, the NSPS will no longer apply to clinker cooler #3 and kiln #3, because the PM limitation pursuant to the NESHAP, 40 CFR 63, Subpart LLL will supersede the limits under the NSPS. There is no exemption in 326 IAC 6-3-2 for facilities subject to a PM limitation under a NESHAP. Therefore, after June 10, 2002, the limits pursuant to 326 IAC 6-3-2 will apply to clinker cooler #3 and kiln #3.

Processes	Units	Process Weight Rate (P)	Allowable Emissions (E)
Finished Material Storage	EU37, EU39A, EU39B, EU40A, and EU40B	300	63.0 or 0.1 lbs/1000 lbs of gases
East Truck Loadout	EU41 and EU42	450	67.7 or 0.1 lbs/1000 lbs of gases
West Truck Loadout	EU43 and EU44	450	67.7 or 0.1 lbs/1000 lbs of gases
Rail Loadout and Articulator	EU45 and EU46	240	60.5 or 0.1 lbs/1000 lbs of gases
Packing Machine	EU47	40	43

The control devices associated with these processes shall be in operation at all times that the associated process(es) are in operation in order to comply with these limits. Based on baghouse characteristics and stack test results the facilities can comply with 326 IAC 6-3-2 (Process Operations).

326 IAC 7-1.1 (Sulfur Dioxide Emission Limitations)

- (1) Pursuant to 326 IAC 7-1.1 (Sulfur Dioxide Emission Limitations), the sulfur dioxide (SO₂) emissions from the combustion of coal in kiln #1, kiln #2, and kiln #3 shall not exceed 6.0 pounds per million Btu (MMBtu) heat input. Compliance will be based on a 30-day rolling weighted average.
- (2) Pursuant to 326 IAC 7-1.1 (Sulfur Dioxide Emission Limitations), the SO₂ emissions from the combustion of coal in the coal-fired stoker shall not exceed six (6.0) pound per million Btu heat input. Compliance will be based on a 30-day rolling weighted average.
- (3) The two (2) natural gas-fired burners in the raw mills #1 and #2 (EU11A and EU12A) shall combust only natural gas. Therefore, the requirements of 326 IAC 7-1.1 (Sulfur Dioxide Emission Limitations) will not apply.

326 IAC 7-1.1 is not federally enforceable.

326 IAC 7-2-1 (Sulfur Dioxide Compliance Reporting)

Pursuant to this rule, a quarterly report shall be submitted including the average sulfur content, heat content, the sulfur dioxide emission rate in pounds per million Btu, and the coal consumptions for each kiln and for the coal-fired stoker. Coal sampling and analysis data shall be collected pursuant to the procedures specified in 326 IAC 3-7-3 for coal combustion. 326 IAC 7-2-1 is not federally enforceable.

326 IAC 8-1-6 (Best Available Control Technology (BACT))

None of the facilities at Lehigh are subject to the requirements of 326 IAC 8-1-6 (BACT) because the potential to emit VOC from each facility is less than 25 tons per year and/or the facilities were constructed prior to January 1, 1980. No other 326 IAC 8 rules apply.

State Rule Applicability - Insignificant Activities

326 IAC 6-3-2 (Process Operations)

Pursuant to 326 IAC 6-3-2 (Process Operations), the PM emissions from the portable welding and refractory work equipment shall not exceed 0.551 pounds per hour each because the maximum process weight rates for these activities are less than 100 pounds per hour.

326 IAC 8-4-3 (Petroleum Liquid Storage Facilities)

All of the petroleum storage tanks at Lehigh have capacities less than 39,000 gallons. Therefore, the requirements of 326 IAC 8-4-3 do not apply.

326 IAC 8-4-6 (Gasoline Dispensing Facilities)

The gasoline dispensing facility at Lehigh was constructed prior to July 1, 1989, and has monthly gasoline throughputs of less than 10,000 gallons. Therefore, the requirements of 326 IAC 8-4-6 do not apply.

326 IAC 8-3-2 (Cold Cleaner Operations)

The degreasing operations are subject to the requirements of 326 IAC 8-3-2 (Cold Cleaner Operations). Pursuant to this rule, the owner or operator shall:

- (a) Equip the cleaner with a cover;
- (b) Equip the cleaner with a facility for draining cleaned parts;
- (c) Close the degreaser cover whenever parts are not being handled in the cleaner;
- (d) Drain cleaned parts for at least fifteen (15) seconds or until dripping ceases;
- (e) Provide a permanent, conspicuous label summarizing the operation requirements;
- (f) Store waste solvent only in covered containers and not dispose of waste solvent or transfer it to another party, in such a manner that greater than twenty percent (20%) of the waste solvent (by weight) can evaporate into the atmosphere.

326 IAC 8-3-5(a) (Cold Cleaner Degreaser Operation and Control)

The degreasing operations are subject to the requirements of 326 IAC 8-3-5(a) (Cold Cleaner Degreaser Operation and Control).

- (a) Pursuant to this rule, the owner or operator of a cold cleaner degreaser facility shall ensure that the following control equipment requirements are met:
 - (1) Equip the degreaser with a cover. The cover must be designed so that it can be easily operated with one (1) hand if:
 - (A) The solvent volatility is greater than two (2) kiloPascals (fifteen (15) millimeters of mercury or three-tenths (0.3) pounds per square inch) measured at thirty-eight degrees Celsius (38°C) (one hundred degrees Fahrenheit (100°F));
 - (B) The solvent is agitated; or
 - (C) The solvent is heated.
 - (2) Equip the degreaser with a facility for draining cleaned articles. If the solvent volatility is greater than four and three-tenths (4.3) kiloPascals (thirty-two (32)

millimeters of mercury or six-tenths (0.6) pounds per square inch) measured at thirty-eight degrees Celsius (38°C) (one hundred degrees Fahrenheit (100°F)), then the drainage facility must be internal such that articles are enclosed under the cover while draining. The drainage facility may be external for applications where an internal type cannot fit into the cleaning system.

- (3) Provide a permanent, conspicuous label which lists the operating requirements outlined in subsection (b).
 - (4) The solvent spray, if used, must be a solid, fluid stream and shall be applied at a pressure which does not cause excessive splashing.
 - (5) Equip the degreaser with one (1) of the following control devices if the solvent volatility is greater than four and three-tenths (4.3) kiloPascals (thirty-two (32) millimeters of mercury or six-tenths (0.6) pounds per square inch) measured at thirty-eight degrees Celsius (38°C) (one hundred degrees Fahrenheit (100°F)), or if the solvent is heated to a temperature greater than forty-eight and nine-tenths degrees Celsius (48.9°C) (one hundred twenty degrees Fahrenheit (120°F)):
 - (A) A freeboard that attains a freeboard ratio of seventy-five hundredths (0.75) or greater.
 - (B) A water cover when solvent is used is insoluble in, and heavier than, water.
 - (C) Other systems of demonstrated equivalent control such as a refrigerated chiller or carbon adsorption. Such systems shall be submitted to the U.S. EPA as a SIP revision.
- (b) Pursuant to 326 IAC 8-3-5(b) (Cold Cleaner Degreaser Operation and Control), the owner or operator of a cold cleaning facility shall ensure that the following operating requirements are met:
- (1) Close the cover whenever articles are not being handled in the degreaser.
 - (2) Drain cleaned articles for at least fifteen (15) seconds or until dripping ceases.
 - (3) Store waste solvent only in covered containers and prohibit the disposal or transfer of waste solvent in any manner in which greater than twenty percent (20%) of the waste solvent by weight could evaporate.

Compliance Requirements

Permits issued under 326 IAC 2-7 are required to ensure that sources can demonstrate compliance with applicable state and federal rules on a more or less continuous basis. All state and federal rules contain compliance provisions, however, these provisions do not always fulfill the requirement for a more or less continuous demonstration. When this occurs IDEM, OAQ, in conjunction with the source, must develop specific conditions to satisfy 326 IAC 2-7-5. As a result, compliance requirements are divided into two sections: Compliance Determination Requirements and Compliance Monitoring Requirements.

Compliance Determination Requirements in permit Section D are those conditions that are found more or less directly within state and federal rules and the violation of which serves as grounds for enforcement action. If these conditions are not sufficient to demonstrate continuous compliance,

they will be supplemented with Compliance Monitoring Requirements, also in permit Section D. Unlike Compliance Determination Requirements, failure to meet Compliance Monitoring conditions would serve as a trigger for corrective actions and not grounds for enforcement action. However, a violation in relation to a compliance monitoring condition will arise through a source's failure to take the appropriate corrective actions within a specific time period.

The compliance monitoring requirements applicable to this source are as follows:

1. The various processes at Lehigh Portland Cement's production plant have applicable compliance monitoring conditions as specified below:
 - (a) Visible emissions notations of the controlled stack exhausts (except those required to operate a COM) shall be performed once per shift during normal daylight operations. A trained employee will record whether emissions are normal or abnormal. For processes operated continuously "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time. In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions. A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process. The Compliance Response Plan for these units shall contain troubleshooting contingency and response steps for when an abnormal emission is observed. Failure to take response steps in accordance with Section C - Compliance Monitoring Plan - Failure to Take Response Steps, shall be considered a violation of this permit.
 - (b) The Permittee shall record the total static pressure drop across all of the baghouses, at least once per shift when the associated processes are in operation. Unless operated under conditions for which the Preventive Maintenance Plan specifies otherwise, the pressure drop across the baghouses shall be maintained within the range of 1.0 to 8.0 inches of water or a range established during the latest stack test. The Compliance Response Plan for these units shall contain troubleshooting contingency and response steps for when the pressure reading is outside of the above mentioned range for any one reading. Failure to take response steps in accordance with Section C - Compliance Monitoring Plan - Failure to Take Response Steps, shall be considered a violation of this permit.
 - (c) In order to document compliance with the applicable PM and dioxin/furan limits specified in the permit, the following inspections shall be performed for each ESP at least once every six months in accordance with the Preventive Maintenance Plan prepared in accordance with Section B - Preventive Maintenance Plan:
 - (1) Plate and electrode alignment;
 - (2) ESP component/controller failure; and
 - (3) Air and water infiltration.

Plate and electrode alignment measurements shall be taken whenever there is an outage of any nature lasting more than three days unless such measurements have been taken within the past three months.

All other inspections shall be made whenever there is an outage of any nature lasting more than three days unless such measurements have been taken within the past three months.

Appropriate response steps for any discrepancies in the above list found during the inspection shall be taken in accordance with Section C - Compliance Monitoring Plan - Failure to Take Response Steps. Failure to take response steps in accordance with Section C - Compliance Monitoring Plan - Failure to Take Response Steps, shall be considered a violation of this permit.

- (d) The ability of the ESPs to control particulate emissions shall be monitored once per shift, when the units are in operation, by measuring and recording the primary and secondary voltages and the currents of the transformer-rectifier (T-R) sets.

Appropriate response steps shall be taken in accordance with Section C - Compliance Monitoring Plan - Failure to Take Response Steps whenever operation is outside any of the following ranges or whenever less than 90% of the total T-R sets are functioning:

- | | | |
|-----|--------------------------|-------------|
| (1) | Primary voltage: | 260 - 300 V |
| (2) | Secondary voltage: | 35 - 55 kV |
| (3) | T-R set primary current: | 50 -75 A |

Failure to take response steps in accordance with Section C - Compliance Monitoring Plan - Failure to Take Response Steps, shall be considered a violation of this permit.

The instrument used for determining the voltages and the T-R set current shall comply with Section C - Pressure Gauge and Other Instrument Specifications, of this permit, shall be subject to approval by IDEM, OAQ, and shall be calibrated at least once every six (6) months.

- (e) An inspection shall be performed each calendar quarter of all bags. All defective bags shall be replaced.
- (f) In the event that bag failure has been observed:
- (1) For multi-compartment units, the affected compartments will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if there are no visible emissions or if the event qualifies as an emergency and the Permittee satisfies the emergency provisions of this permit (Section B- Emergency Provisions). Within eight (8) business hours of the determination of failure, response steps according to the timetable described in the Compliance Response Plan shall be initiated. For any failure with corresponding response steps and timetable not described in the Compliance Response Plan, response steps shall be devised within eight (8) business hours of discovery of the failure and shall include a timetable for completion. Failure to take response steps in accordance with Section C - Compliance Monitoring Plan - Failure to Take Response Steps, shall be considered a violation of this permit.
 - (2) For single compartment baghouses, failed units and the associated process will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).

- (g) Pursuant to 326 IAC 3-5 (Continuous Monitoring of Emissions), 326 IAC 2-1.1-11 and/or 40 CFR Parts 60 and 63, a continuous monitoring system shall be installed, calibrated, maintained, and operated for measuring the opacity from each of the kilns, pursuant to 326 IAC 3-5. The continuous opacity monitor shall be installed and operational prior to conducting the performance tests required in the permit. The continuous opacity monitor shall meet the performance specifications of 326 IAC 3-5-2 and 40 CFR 63.8(c). 326 IAC 3-5 is not federally enforceable. On and after June 10, 2002, the NSPS requirements regarding the COM for kiln #3 shall be superseded by the NESHAP requirements regarding the COM.
- (h) Pursuant to 326 IAC 3-5 (Continuous Monitoring of Emissions), 326 IAC 2-1.1-11, 40 CFR Part 63, and/or 40 CFR Part 60, a continuous monitoring system shall be installed, calibrated, maintained, and operated for measuring opacity from the clinker coolers (EU19, EU21 and EU23). The continuous monitoring systems shall meet the performance specifications of 326 IAC 3-5-2 and 40 CFR 60.13 (for clinker cooler #3 (EU23)), and shall demonstrate continuous compliance with Section C - Opacity, and Conditions D.5.3 (b) and D.5.6(b). 326 IAC 3-5 is not federally enforceable. On and after June 10, 2002, the NSPS requirements regarding the COM for clinker cooler #3 shall be superseded by the NESHAP requirements regarding the COM.

These monitoring conditions are necessary because the control devices for the processes must operate properly to ensure compliance with 326 IAC 6-3-2 (Process Operations), 326 IAC 2-2 (Prevention of Significant Deterioration), 326 IAC 5-1 (Visible Emissions), 40 CFR 60, Subpart F (NSPS for Portland Cement Plants), 40 CFR 63, Subpart LLL (NESHAP for Portland Cement Plants) and 326 IAC 2-7 (Part 70).

Air Toxic Emissions

Indiana presently requests applicants to provide information on emissions of the 187 hazardous air pollutants set out in the Clean Air Act Amendments of 1990. These pollutants are either carcinogenic or otherwise considered toxic and are commonly used by industries. They are listed as air toxics on the Office of Air Quality (OAQ) Part 70 Application Form GSD-08.

This source will emit levels of air toxics greater than those that constitute major source applicability according to Section 112 of the Clean Air Act.

Conclusion

The operation of this Portland cement manufacturing operation shall be subject to the conditions of the attached proposed Part 70 Permit No. T093-5990-00002.

**Appendix A: Emission Calculations
CWOP/OWOP Equipment
Pan Conveyor/Packing Machine**

Appendix A: Page 1 of 20

Company Name: Lehigh Portland Cement Company
Address City IN Zip: 121 North First Street, Mitchell, IN 47446
Part 70 Permit No.: T093-5990-00002
Plt ID: 093-00002
Reviewer: Nisha Sizemore

A. Potential Emissions from Pan Conveyor

Outlet grain loading of baghouse: 0.02 gr/dscf
Actual air flow rate: 10,165 acfm

$$\begin{aligned}\text{Controlled emissions} &= 0.02 \text{ gr/dscf} \times 10,165 \text{ acfm} \times 1 \text{ lb/7000gr} \times 60 \text{ min/hr} \\ &= 1.74 \text{ pounds per hour} \\ &= 7.63 \text{ tons per year}\end{aligned}$$

Efficiency of baghouse: 99.9%

$$\begin{aligned}\text{Potential emissions} &= \frac{\text{Controlled emissions}}{(1 - \text{Efficiency (\%)})} \\ &= \frac{1.74 \text{ lbs/hr}}{0.001} \\ &= 1740 \text{ pounds per hour}\end{aligned}$$

B. Potential Emissions from Packing Machine

Outlet grain loading of baghouse: 0.02 gr/dscf
Actual air flow rate: 10,428 acfm

$$\begin{aligned}\text{Controlled emissions} &= 0.02 \text{ gr/dscf} \times 10,428 \text{ acfm} \times 1 \text{ lb/7000gr} \times 60 \text{ min/hr} \\ &= 1.79 \text{ pounds per hour} \\ &= 7.83 \text{ tons per year}\end{aligned}$$

Efficiency of baghouse: 99.9%

$$\begin{aligned}\text{Potential emissions} &= \frac{\text{Controlled emissions}}{(1 - \text{Efficiency (\%)})} \\ &= \frac{1.79 \text{ lbs/hr}}{0.001} \\ &= 1790 \text{ pound per hour}\end{aligned}$$

**Appendix A: Emission Calculations
PM/PM10 Compliance Calculations**

Appendix A: Page 2 of 20

Company Name: Lehigh Portland Cement Company
Address City IN Zip: 121 North First Street, Mitchell, IN 47446
Title V No.: T093-5990-00002
Plt ID: 093-00002
Reviewer: Bryan Sheets
Date: 9/8/98

A. Quarry Activities

1. Potential to Emit

Emissions from the quarry activities will come from drilling/blasting, hauling, and storage. The emissions from these activities are:

$$\begin{aligned}\text{Drilling/Blasting Emissions} &= \text{Process Weight Rate (tons/hr)} \times \text{Emission Factor (lbs/ton)} \\ &= 812 \text{ tons/hr} \times 0.0005 \text{ lbs/ton} \\ &= 0.41 \text{ lbs/hr}\end{aligned}$$

$$\begin{aligned}\text{Hauling Emissions} &= \text{Vehicle Miles Traveled (mi/hr)} \times \text{Emission Factor (lbs/mile)} \\ &= 10 \text{ miles/hr} \times 6.2 \text{ lbs/mi} \\ &= 62 \text{ lbs/hr}\end{aligned}$$

$$\text{Storage Emissions} = \text{Emission Factor (lb/acre/day)} \times \text{Storage Capacity (acres)} / 24 \text{ hrs/day}$$

$$\text{Emission Factor} = 1.7 \cdot (s/1.5)^{0.11} \cdot (365-p)/235 \cdot (f/15)$$

where s =	% silt	= 4.9	4.9
p =	days of rain greater than or equal to 0.01 inches	= 125	125
f =	% of wind greater than or equal to 12 mph	= 15	15
=	5.67	lb/acre/day	

$$\begin{aligned}\text{Storage Emissions} &= 5.67 \text{ lb/acre/day} \times 2.75 \text{ acres} / 24 \text{ hrs/day} && 2.75 \\ &= 0.65 \text{ lbs/hr}\end{aligned}$$

The emissions from the quarry activities are much less than the allowable emissions. Therefore, this process can comply with 326 IAC 6-3.

B. Quarry Material Sizing Process

1. Allowable Limit

Pursuant to 326 IAC 6-3, particulate matter emissions from the quarry material sizing facilities shall not exceed an amount determined by the following equation:

$$\begin{aligned}E &= 55.0(P)^{0.11} - 40, && \text{where } P = \text{process weight rate in tons/hr} \\ & && E = \text{allowable emission rate in lbs/hr} \\ &= 55.0(975)^{0.11} - 40 \\ &= 77.3 \text{ lbs/hr}\end{aligned}$$

2. Potential to Emit

Emissions from the sizing activities will come from primary, secondary, and tertiary crushing and screening. The emissions from these activities are:

EU01	Outlet grain loading of primary crusher baghouse:	0.02 gr/dscf
	Actual air flow rate of primary crusher baghouse:	5,000 acfm
Controlled emissions = 0.02 gr/dscf x 5,000 acfm x 1 lb/7000gr x 60 min/hr		
= 0.85 pounds per hour		
EU02	Outlet grain loading of surge bin baghouse:	0.02 gr/dscf
	Actual air flow rate of surge bin baghouse:	5,000 acfm
Controlled emissions = 0.02 gr/dscf x 5,000 acfm x 1 lb/7000gr x 60 min/hr		
= 0.85 pounds per hour		
EU03/EU04	Outlet grain loading of secondary/tertiary crusher baghouse:	0.02 gr/dscf
	Actual air flow rate of secondary/tertiary crusher baghouse:	8,000 acfm
Controlled emissions = 0.02 gr/dscf x 8,000 acfm x 1 lb/7000gr x 60 min/hr		
= 1.37 pounds per hour		
EU05	Outlet grain loading of north screen house baghouse:	0.02 gr/dscf
	Actual air flow rate of north screen house baghouse:	1,000 acfm
Controlled emissions = 0.02 gr/dscf x 1,000 acfm x 1 lb/7000gr x 60 min/hr		
= 0.17 pounds per hour		
EU06	Outlet grain loading of south screen house baghouse:	0.02 gr/dscf
	Actual air flow rate of south screen house baghouse:	8,000 acfm
Controlled emissions = 0.02 gr/dscf x 8,000 acfm x 1 lb/7000gr x 60 min/hr		
= 1.37 pounds per hour		
EU07	Outlet grain loading of #7 to #8 belt transfer point baghouse:	0.02 gr/dscf
	Actual air flow rate of #7 to #8 belt transfer point baghouse:	2,450 acfm
Controlled emissions = 0.02 gr/dscf x 2,450 acfm x 1 lb/7000gr x 60 min/hr		
= 0.42 pounds per hour		
EU08	Outlet grain loading of #8 to #9 belt transfer point baghouse:	0.02 gr/dscf
	Actual air flow rate of #8 to #9 belt transfer point baghouse:	2,450 acfm
Controlled emissions = 0.02 gr/dscf x 2,450 acfm x 1 lb/7000gr x 60 min/hr		
= 0.42 pounds per hour		

F02 Transfer Point #9 to #10 Emissions = Process Weight Rate (tons/hr) x Emission Factor (lbs/ton)

$$\begin{aligned}\text{Emission Factor} &= k(0.0032)^* (U/5)^{1.3}/(M/2)^{1.4} \\ &= 0.0135 \text{ lb/ton}\end{aligned}$$

$$\begin{aligned}\text{where } k &= 0.74 \text{ (particle size multiplier)} \\ U &= 10 \text{ mile/hr mean wind speed} \\ M &= 1.1 \text{ \% material moisture content}\end{aligned}$$

$$\begin{aligned}\text{Emissions} &= 812 \text{ tons/hr} \times 0.0254 \text{ lbs/ton} \\ &= 10.9 \text{ lbs/hr}\end{aligned}$$

The emissions from the raw material sizing activities are much less than the allowable emissions. Therefore, this process can comply with 326 IAC 6-3.

C. Raw Material Storage and Handling Facilities

1. Allowable Emissions

Pursuant to 326 IAC 6-3, particulate matter emissions from the raw material storage and handling facilities shall not exceed an amount determined by the following equation:

$$E = 55.0(P)^{0.11} - 40, \quad \begin{array}{l} \text{where } P = \text{process weight rate in tons/hr} \\ E = \text{allowable emission rate in lbs/hr} \end{array}$$

$$\begin{aligned}\text{For conveyor (EU09)} \quad E &= 55.0(200)^{0.11} - 40 \\ &= 58.5 \text{ lbs/hr}\end{aligned}$$

$$\begin{aligned}\text{For shale crusher (EU10)} \quad E &= 55.0(200)^{0.11} - 40 \\ &= 58.5 \text{ lbs/hr}\end{aligned}$$

2. Potential to Emit

Emissions from the storage and handling activities will come from transfer points on conveyors and outdoor storage. The emissions from these activities are:

EU09	Outlet grain loading of shale crusher baghouse:	0.02 gr/dscf
	Actual air flow rate of shale crusher baghouse:	2,450 acfm
Controlled emissions = 0.02 gr/dscf x 2,450 acfm x 1 lb/7000gr x 60 min/hr		
		= 0.42 pounds per hour

EU10	Outlet grain loading of conveyor baghouse:	0.02 gr/dscf
	Actual air flow rate of conveyor baghouse:	8,000 acfm
Controlled emissions = 0.02 gr/dscf x 8,000 acfm x 1 lb/7000gr x 60 min/hr		
		= 1.37 pounds per hour

F03/F04 Outdoor Storage Emissions = Storage Capacity (acres) x Emission Factor (lb/acre/day) / 24 hrs/day

$$\text{Emission Factor} = 1.7 \cdot (s/1.5)^{(365-p)/235} \cdot (f/15)$$

$$\begin{aligned} \text{where } s &= 4 \text{ \% silt content of material} \\ p &= 125 \text{ days of rain greater than or equal to 0.01 inches} \\ f &= 15 \text{ \% of wind greater than or equal to 12 mph} \\ &= 4.63 \text{ lb/acre/day} \end{aligned}$$

$$\begin{aligned} \text{Emissions} &= 2.75 \text{ acres} \times 4.63 \text{ lb/acre/day} / 24 \text{ hrs/day} \\ &= 0.53 \text{ lbs/hr} \end{aligned}$$

The emissions from the raw material storage and handling activities are less than the allowable emissions. Therefore, this process can comply with 326 IAC 6-3.

D. Raw Mill Process

1. Allowable Emissions

Pursuant to 326 IAC 6-3, particulate matter emissions from the raw mill facilities shall not exceed an amount determined by the following equation:

$$E = 55.0(P)^{0.11} - 40, \quad \begin{aligned} \text{where } P &= \text{process weight rate in tons/hr} \\ E &= \text{allowable emission rate in lbs/hr} \end{aligned}$$

$$\begin{aligned} \text{For each raw mill (EU11, EU12)} \quad E &= 55.0(100)^{0.11} - 40 \\ &= 51.3 \text{ lbs/hr} \end{aligned}$$

2. Potential to Emit

Emissions from the raw mill activities will come from the two raw mills and the coal fired stoker. The emissions from these activities are:

EU11	Outlet grain loading of raw mill #1 baghouse:	0.02 gr/dscf
	Actual air flow rate of raw mill #1 baghouse:	26,000 acfm
Controlled emissions = 0.02 gr/dscf x 26,000 acfm x 1 lb/7000gr x 60 min/hr		
= 4.46 pounds per hour		

EU12	Outlet grain loading of raw mill #2 baghouse:	0.02 gr/dscf
	Actual air flow rate of raw mill #2 baghouse:	26,000 acfm
Controlled emissions = 0.02 gr/dscf x 26,000 acfm x 1 lb/7000gr x 60 min/hr		
= 4.46 pounds per hour		

The emissions from the coal fired stoker will exhaust through the two raw mill baghouses. Therefore, there are no added emissions due to the stoker. The emissions from the raw mill activities are much less than the allowable. Therefore, this process can comply with 326 IAC 6-3.

E. Raw Mill Storage Process**1. Allowable Emissions**

Pursuant to 326 IAC 6-3, particulate matter emissions from the raw mill storage process shall not exceed an amount determined by the following equation:

$$\begin{aligned}
 E &= 55.0(P)^{0.11} - 40, & \text{where } P &= \text{process weight rate in tons/hr} \\
 & & E &= \text{allowable emission rate in lbs/hr} \\
 &= 55.0(250)^{0.11} - 40 \\
 &= 61.0 \text{ lbs/hr}
 \end{aligned}$$

2. Potential to Emit

Emissions from the raw mill storage will come from the two blending bins and the five supply bins. The emissions from these activities are:

EU13	Outlet grain loading of blending bin #1 baghouse: Actual air flow rate of blending bin #1 baghouse:	0.02 gr/dscf 6,000 acfm
$\text{Controlled emissions} = 0.02 \text{ gr/dscf} \times 6,000 \text{ acfm} \times 1 \text{ lb/7000gr} \times 60 \text{ min/hr}$ $= 1.03 \text{ pounds per hour}$		

EU13	Outlet grain loading of blending bin #2 baghouse: Actual air flow rate of blending bin #2 baghouse:	0.02 gr/dscf 3,000 acfm
$\text{Controlled emissions} = 0.02 \text{ gr/dscf} \times 3,000 \text{ acfm} \times 1 \text{ lb/7000gr} \times 60 \text{ min/hr}$ $= 0.51 \text{ pounds per hour}$		

EU14	Outlet grain loading of kiln supply bin #1 baghouse: Actual air flow rate of kiln supply bin #1 baghouse:	0.02 gr/dscf 6,000 acfm
$\text{Controlled emissions} = 0.02 \text{ gr/dscf} \times 6,000 \text{ acfm} \times 1 \text{ lb/7000gr} \times 60 \text{ min/hr}$ $= 1.03 \text{ pounds per hour}$		

EU14	Outlet grain loading of kiln supply bin #2 baghouse: Actual air flow rate of kiln supply bin #2 baghouse:	0.02 gr/dscf 3,000 acfm
$\text{Controlled emissions} = 0.02 \text{ gr/dscf} \times 3,000 \text{ acfm} \times 1 \text{ lb/7000gr} \times 60 \text{ min/hr}$ $= 0.51 \text{ pounds per hour}$		

EU18	Outlet grain loading of kiln feed bin #1 baghouse: Actual air flow rate of kiln feed bin #1 baghouse:	0.02 gr/dscf 5,500 acfm
$\text{Controlled emissions} = 0.02 \text{ gr/dscf} \times 5,500 \text{ acfm} \times 1 \text{ lb/7000gr} \times 60 \text{ min/hr}$ $= 0.94 \text{ pounds per hour}$		

EU20	Outlet grain loading of kiln feed bin #2 baghouse:	0.02 gr/dscf
	Actual air flow rate of kiln feed bin #2 baghouse:	5,500 acfm

$$\text{Controlled emissions} = 0.02 \text{ gr/dscf} \times 5,500 \text{ acfm} \times 1 \text{ lb/7000gr} \times 60 \text{ min/hr}$$

$$= 0.94 \text{ pounds per hour}$$

EU22	Outlet grain loading of kiln feed bin #3 baghouse:	0.02 gr/dscf
	Actual air flow rate of kiln feed bin #3 baghouse:	6,000 acfm

$$\text{Controlled emissions} = 0.02 \text{ gr/dscf} \times 6,000 \text{ acfm} \times 1 \text{ lb/7000gr} \times 60 \text{ min/hr}$$

$$= 1.03 \text{ pounds per hour}$$

The emissions from the raw mill storage facilities are less than the allowable emissions. Therefore, this process can comply with 326 IAC 6-3.

F. Kilns

1. Allowable Emissions

Pursuant to 326 IAC 6-3, particulate matter emissions from kiln #1 shall not exceed an amount determined by the following equation:

$$E = 15.0(P)^{0.67}, \quad \text{where } P = \text{process weight rate in tons/hr}$$

$$E = \text{allowable emission rate in lbs/hr}$$

$$= 15.0(38)^{0.50}$$

$$= 92 \text{ lbs/hr}$$

Pursuant to 326 IAC 6-3, particulate matter emissions from kiln #2 shall not exceed an amount determined by the following equation:

$$E = 15.0(P)^{0.67}, \quad \text{where } P = \text{process weight rate in tons/hr}$$

$$E = \text{allowable emission rate in lbs/hr}$$

$$= 15.0(38)^{0.50}$$

$$= 92 \text{ lbs/hr}$$

Pursuant to 326 IAC 6-3, particulate matter emissions from kiln #3 shall not exceed an amount determined by the following equation:

$$E = 55.0(P)^{0.11} - 40, \quad \text{where } P = \text{process weight rate in tons/hr}$$

$$E = \text{allowable emission rate in lbs/hr}$$

$$= 55.0(43)^{0.11} - 40$$

$$= 43 \text{ lbs/hr}$$

Pursuant to 40 CFR 60, Subpart F, particulate matter emissions from kiln #3 shall not exceed 0.3 pounds per ton of raw feed. This is equivalent to the following:

$$0.3 \text{ lbs/ton} \times 43 \text{ tons/hr}$$

$$= 12.9 \text{ lbs/hr}$$

2. Potential to Emit

Emissions from the kilns are:

EU15, EU16	Outlet grain loading of kiln #1 and kiln #2 ESP:	0.02 gr/dscf
	Actual air flow rate of kiln #1 and kiln #2 ESP:	221,000 acfm

$$\text{Controlled emissions} = 0.02 \text{ gr/dscf} \times 221,000 \text{ acfm} \times 1 \text{ lb/7000gr} \times 60 \text{ min/hr}$$

$$= 37.8 \text{ pounds per hour}$$

EU17	Outlet grain loading of kiln #3 ESP:	0.02 gr/dscf
	Actual air flow rate of kiln #3 ESP:	72,000 acfm

$$\text{Controlled emissions} = 0.02 \text{ gr/dscf} \times 72,000 \text{ acfm} \times 1 \text{ lb/7000gr} \times 60 \text{ min/hr}$$

$$= 12.3 \text{ pounds per hour}$$

The emissions from the kilns are less than the allowable emissions. Therefore, the kilns can comply with 326 IAC 6-3 and 40 CFR 60, Subpart F.

G. Cement Kiln Dust Storage and Handling

1. Allowable Emissions

Pursuant to 326 IAC 6-3, particulate matter emissions from the CKD storage and handling shall not exceed an amount determined by the following equation:

$$E = 4.10 (P)^{0.67} \quad \text{where } E = \text{allowable PM emissions in lbs/hr}$$

$$P = \text{process weight rate in tons/hr}$$

$$= 4.1(100)^{0.67}$$

$$= 89.70 \text{ lbs/hr}$$

2. Potential to Emit

Emissions from the CKD storage and handling facilities will come from the CKD bin, truck loading station, and storage pile. The emissions from these activities are:

EU24	Outlet grain loading of kiln dust bin baghouse:	0.02 gr/dscf
	Actual air flow rate of kiln dust bin baghouse:	5,330 acfm

$$\text{Controlled emissions} = 0.02 \text{ gr/dscf} \times 5,330 \text{ acfm} \times 1 \text{ lb/7000gr} \times 60 \text{ min/hr}$$

$$= 0.91 \text{ pounds per hour}$$

EU24A Outlet grain loading of loading station baghouse: 0.02 gr/dscf
 Actual air flow rate of loading station baghouse: 2,000 acfm

$$\begin{aligned}\text{Controlled emissions} &= 0.02 \text{ gr/dscf} \times 2,000 \text{ acfm} \times 1 \text{ lb/7000gr} \times 60 \text{ min/hr} \\ &= 0.34 \text{ pounds per hour}\end{aligned}$$

F05 Storage Emissions = Emission Factor (lb/acre/day) x Storage Capacity (acres) / 24 hrs/day

$$\text{Emission Factor} = 1.7 \cdot (s/1.5) \cdot (365-p)/235 \cdot (f/15)$$

where s = % silt = 4.9

p = days of rain greater than or equal to 0.01 inches = 125

f = % of wind greater than or equal to 12 mph = 15

$$= 5.67 \text{ lb/acre/day}$$

$$\text{Storage Emissions} = 5.67 \text{ lb/acre/day} \times 0.25 \text{ acres} / 24 \text{ hrs/day}$$

$$= 0.06 \text{ lbs/hr}$$

4.9
125
15

The emissions from the CKD storage and handling facilities are less than the allowable emissions. Therefore, the facilities can comply with 326 IAC 6-3.

H. Clinker Coolers

1. Allowable Emissions

Pursuant to 326 IAC 6-3, particulate matter emissions from clinker cooler #1 shall not exceed an amount determined by the following equation:

$$\begin{aligned}E &= 55.0(P)^{0.11} - 40, & \text{where } P &= \text{process weight rate in tons/hr} \\ & & E &= \text{allowable emission rate in lbs/hr} \\ &= 55.0(38)^{0.11} - 40 \\ &= 42 \text{ lbs/hr}\end{aligned}$$

Pursuant to 326 IAC 6-3, particulate matter emissions from clinker cooler #2 shall not exceed an amount determined by the following equation:

$$\begin{aligned}E &= 55.0(P)^{0.11} - 40, & \text{where } P &= \text{process weight rate in tons/hr} \\ & & E &= \text{allowable emission rate in lbs/hr} \\ &= 55.0(38)^{0.11} - 40 \\ &= 42 \text{ lbs/hr}\end{aligned}$$

Pursuant to 326 IAC 6-3, particulate matter emissions from clinker cooler #3 shall not exceed an amount determined by the following equation:

$$E = 55.0(P)^{0.11} - 40, \quad \text{where } P = \text{process weight rate in tons/hr}$$

$$E = \text{allowable emission rate in lbs/hr}$$

$$= 55.0(43)^{0.11} - 40$$

$$= 43 \text{ lbs/hr}$$

Pursuant to 40 CFR 60, Subpart F, particulate matter emissions from cooler #3 shall not exceed 0.1 pounds per ton of raw kiln feed. This is equivalent to the following:

$$0.1 \text{ lbs/ton} \times 43 \text{ tons/hr}$$

$$= 4.3 \text{ lbs/hr}$$

2. Potential to Emit

Emissions from the clinker coolers are:

EU19	Outlet grain loading of clinker cooler #1 baghouse:	0.02 gr/dscf
	Actual air flow rate of clinker cooler #1 baghouse:	101,000 acfm

$$\text{Controlled emissions} = 0.02 \text{ gr/dscf} \times 101,000 \text{ acfm} \times 1 \text{ lb/7000gr} \times 60 \text{ min/hr}$$

$$= 17.3 \text{ pounds per hour}$$

EU21	Outlet grain loading of clinker cooler #2 baghouse:	0.02 gr/dscf
	Actual air flow rate of clinker cooler #2 baghouse:	101,000 acfm

$$\text{Controlled emissions} = 0.02 \text{ gr/dscf} \times 101,000 \text{ acfm} \times 1 \text{ lb/7000gr} \times 60 \text{ min/hr}$$

$$= 17.3 \text{ pounds per hour}$$

	Outlet grain loading of clinker cooler #3 baghouse:	0.02 gr/dscf
	Actual air flow rate of clinker cooler #3 baghouse:	90,000 acfm

EU23	Controlled emissions = 0.02 gr/dscf x 90,000 acfm x 1 lb/7000gr x 60 min/hr
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$$= 15.4 \text{ pounds per hour}$$

The emissions from the clinker coolers are less than the 326 IAC 6-3 allowable emissions. Although the potential to emit PM from clinker cooler #3 is greater than the NSPS, results from stack tests performed on April 7, 1988 demonstrates that the cooler can meet the limit. Therefore, the clinker coolers can meet 326 IAC 6-3 and 40 CFR 60, Subpart F.

H. Clinker Handling

1. Allowable Emissions

Pursuant to 326 IAC 6-3, particulate matter emissions from clinker handling facilities shall not exceed an amount determined by the equation:

$$\begin{aligned}
 E &= 55.0(P)^{0.11} - 40, & \text{where } P &= \text{process weight rate in tons/hr} \\
 & & E &= \text{allowable emission rate in lbs/hr} \\
 &= 55.0(120)^{0.11} - 40 \\
 &= 53.1 \text{ lbs/hr}
 \end{aligned}$$

Pursuant to 326 IAC 6-3, particulate matter emissions from the roll crusher shall not exceed an amount determined by the equation:

$$\begin{aligned}
 E &= 55.0(P)^{0.11} - 40, & \text{where } P &= \text{process weight rate in tons/hr} \\
 & & E &= \text{allowable emission rate in lbs/hr} \\
 &= 55.0(240)^{0.11} - 40 \\
 &= 60.5 \text{ lbs/hr}
 \end{aligned}$$

2. Potential to Emit

Emissions from the clinker handling activities will come from the towers, conveyors, ladders, and roll crusher. The emissions from these activities are:

EU25	Outlet grain loading of south storage drag baghouse:	0.02 gr/dscf
	Actual air flow rate of south storage drag baghouse:	2,800 acfm
Controlled emissions = 0.02 gr/dscf x 2,800 acfm x 1 lb/7000gr x 60 min/hr		
= 0.48 pounds per hour		
EU26	Outlet grain loading of north clinker tower baghouse:	0.02 gr/dscf
	Actual air flow rate of north clinker tower baghouse:	10,500 acfm
Controlled emissions = 0.02 gr/dscf x 10,500 acfm x 1 lb/7000gr x 60 min/hr		
= 1.80 pounds per hour		
EU27	Outlet grain loading of south clinker tower baghouse:	0.02 gr/dscf
	Actual air flow rate of south clinker tower baghouse:	10,000 acfm
Controlled emissions = 0.02 gr/dscf x 10,000 acfm x 1 lb/7000gr x 60 min/hr		
= 1.71 pounds per hour		
EU28	Outlet grain loading of hot spout clinker ladder baghouse:	0.02 gr/dscf
	Actual air flow rate of hot spout clinker ladder baghouse:	10,500 acfm
Controlled emissions = 0.02 gr/dscf x 10,500 acfm x 1 lb/7000gr x 60 min/hr		
= 1.80 pounds per hour		

EU29	Outlet grain loading of pan conveyor baghouse:	0.02 gr/dscf
	Actual air flow rate of pan conveyor baghouse:	10,165 acfm
Controlled emissions = 0.02 gr/dscf x 10,165 acfm x 1 lb/7000gr x 60 min/hr		
= 1.74 pounds per hour		

EU30	Outlet grain loading of east clinker ladder baghouse:	0.02 gr/dscf
	Actual air flow rate of east clinker ladder baghouse:	7,200 acfm
Controlled emissions = 0.02 gr/dscf x 7,200 acfm x 1 lb/7000gr x 60 min/hr		
= 1.23 pounds per hour		

EU31	Outlet grain loading of roll crusher baghouse:	0.02 gr/dscf
	Actual air flow rate of roll crusher baghouse:	11,000 acfm
Controlled emissions = 0.02 gr/dscf x 11,000 acfm x 1 lb/7000gr x 60 min/hr		
= 1.89 pounds per hour		

The emissions from the clinker handling facilities are less than the allowable emissions. Therefore, the clinker handling facilities can comply with 326 IAC 6-3.

I. Finish Mills

1. Allowable Emissions

Pursuant to 326 IAC 6-3, particulate matter emissions from finish mills #1, 2 and 3 shall each not exceed an amount determined by the following equation:

$$\begin{aligned}
 E &= 55.0(P)^{0.11} - 40, & \text{where } P &= \text{process weight rate in tons/hr} \\
 & & E &= \text{allowable emission rate in lbs/hr} \\
 &= 55.0(37)^{0.11} - 40 \\
 &= 42 \text{ lbs/hr}
 \end{aligned}$$

Pursuant to 326 IAC 6-3, particulate matter emissions from finish mill #4 and associated separator and lime bin shall not exceed an amount determined by the following equation:

$$\begin{aligned}
 E &= 55.0(P)^{0.11} - 40, & \text{where } P &= \text{process weight rate in tons/hr} \\
 & & E &= \text{allowable emission rate in lbs/hr} \\
 &= 55.0(50)^{0.11} - 40 \\
 &= 45 \text{ lbs/hr}
 \end{aligned}$$

J. Finish Material Storage Facilities**1. Allowable Emissions**

Pursuant to 326 IAC 6-3, particulate matter emissions from finish material storage facilities shall not exceed an amount determined by the following equation:

$$E = 55.0(P)^{0.11} - 40, \quad \text{where } P = \text{process weight rate in tons/hr}$$

$$E = \text{allowable emission rate in lbs/hr}$$

$$= 55.0(60)^{0.11} - 40$$

$$= 46 \text{ lbs/hr}$$

2. Potential to Emit

Emissions from the storage activities will come from the surge bin, north and south silo operations and transfers. The emissions from these activities are:

EU37	Outlet grain loading of surge bin baghouse:	0.02 gr/dscf
	Actual air flow rate of surge bin baghouse:	2,800 acfm
Controlled emissions = 0.02 gr/dscf x 2,800 acfm x 1 lb/7000gr x 60 min/hr		
= 0.48 pounds per hour		

EU39	Outlet grain loading of north silo operation baghouse:	0.02 gr/dscf
	Actual air flow rate of north silo operation baghouse:	10,000 acfm
Controlled emissions = 0.02 gr/dscf x 10,000 acfm x 1 lb/7000gr x 60 min/hr		
= 1.71 pounds per hour		

EU39	Outlet grain loading of south silo operation baghouse:	0.02 gr/dscf
	Actual air flow rate of south silo operation baghouse:	10,000 acfm
Controlled emissions = 0.02 gr/dscf x 10,000 acfm x 1 lb/7000gr x 60 min/hr		
= 1.71 pounds per hour		

EU40	Outlet grain loading of silo transfers 10/20 baghouse:	0.02 gr/dscf
	Actual air flow rate of silo transfers 10/20 baghouse:	3,200 acfm
Controlled emissions = 0.02 gr/dscf x 3,200 acfm x 1 lb/7000gr x 60 min/hr		
= 0.55 pounds per hour		

EU40	Outlet grain loading of silo transfers 30/40 baghouse:	0.02
	Actual air flow rate of silo transfers 30/40 baghouse:	3,200
Controlled emissions = 0.02 gr/dscf x 3,200 acfm x 1 lb/7000gr x 60 min/hr		
= 0.55 pounds per hour		

The emissions from the finish material storage facilities are less than the allowable emissions. Therefore, the finish material facilities can comply with 326 IAC 6-3.

K. Bulk Loading and Packaging

1. Allowable Emissions

Pursuant to 326 IAC 6-3, particulate matter emissions from east and west truck loadout systems shall each not exceed an amount determined by the following equation:

$$\begin{aligned}
 E &= 55.0(P)^{0.11} - 40, & \text{where } P &= \text{process weight rate in tons/hr} \\
 & & E &= \text{allowable emission rate in lbs/hr} \\
 &= 55.0(450)^{0.11} - 40 \\
 &= 67.7 \text{ lbs/hr}
 \end{aligned}$$

Pursuant to 326 IAC 6-3, particulate matter emissions from railroad loadout system shall not exceed an amount determined by the following equation:

$$\begin{aligned}
 E &= 55.0(P)^{0.11} - 40, & \text{where } P &= \text{process weight rate in tons/hr} \\
 & & E &= \text{allowable emission rate in lbs/hr} \\
 &= 55.0(240)^{0.11} - 40 \\
 &= 60.5 \text{ lbs/hr}
 \end{aligned}$$

Pursuant to 326 IAC 6-3, particulate matter emissions from the packing machine shall not exceed an amount determined by the following equation:

$$\begin{aligned}
 E &= 55.0(P)^{0.11} - 40, & \text{where } P &= \text{process weight rate in tons/hr} \\
 & & E &= \text{allowable emission rate in lbs/hr} \\
 &= 55.0(40)^{0.11} - 40 \\
 &= 43 \text{ lbs/hr}
 \end{aligned}$$

2. Potential to Emit

Emissions from the bulk loading and packaging activities will come from the truck and rail loadouts and packing machine. The emissions from these activities are:

EU41	Outlet grain loading of east truck loadout bin baghouse:	0.02 gr/dscf
	Actual air flow rate of east truck loadout bin baghouse:	2,440 acfm
Controlled emissions = 0.02 gr/dscf x 2,440 acfm x 1 lb/7000gr x 60 min/hr		
= 0.42 pounds per hour		

EU42	Outlet grain loading of east truck vaculoader baghouse:	0.02 gr/dscf
	Actual air flow rate of east truck vaculoader baghouse:	1,240 acfm
Controlled emissions = 0.02 gr/dscf x 1,240 acfm x 1 lb/7000gr x 60 min/hr		
= 0.21 pounds per hour		

EU43	Outlet grain loading of west truck loadout bin baghouse:	0.02 gr/dscf
	Actual air flow rate of west truck loadout bin baghouse:	2,440 acfm
Controlled emissions = 0.02 gr/dscf x 2,440 acfm x 1 lb/7000gr x 60 min/hr		
= 0.42 pounds per hour		

EU44	Outlet grain loading of west truck vaculoader baghouse:	0.02 gr/dscf
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Actual air flow rate of west truck vacuolader baghouse: 1,240 acfm

$$\begin{aligned}\text{Controlled emissions} &= 0.02 \text{ gr/dscf} \times 1,240 \text{ acfm} \times 1 \text{ lb/7000gr} \times 60 \text{ min/hr} \\ &= 0.21 \text{ pounds per hour}\end{aligned}$$

EU45 Outlet grain loading of railroad loadout bin baghouse: 0.02 gr/dscf
Actual air flow rate of railroad loadout bin baghouse: 4,000 acfm

$$\begin{aligned}\text{Controlled emissions} &= 0.02 \text{ gr/dscf} \times 4,000 \text{ acfm} \times 1 \text{ lb/7000gr} \times 60 \text{ min/hr} \\ &= 0.69 \text{ pounds per hour}\end{aligned}$$

EU46 Outlet grain loading of railroad articuloader baghouse: 0.02 gr/dscf
Actual air flow rate of railroad articuloader baghouse: 1,200 acfm

$$\begin{aligned}\text{Controlled emissions} &= 0.02 \text{ gr/dscf} \times 1,200 \text{ acfm} \times 1 \text{ lb/7000gr} \times 60 \text{ min/hr} \\ &= 0.21 \text{ pounds per hour}\end{aligned}$$

EU47 Outlet grain loading of packing machine baghouse: 0.02 gr/dscf
Actual air flow rate of packing machine baghouse: 10,428 acfm

$$\begin{aligned}\text{Controlled emissions} &= 0.02 \text{ gr/dscf} \times 10,428 \text{ acfm} \times 1 \text{ lb/7000gr} \times 60 \text{ min/hr} \\ &= 1.79 \text{ pounds per hour}\end{aligned}$$

The emissions from the bulk loading and packaging facilities are less than the allowable emissions. Therefore, the bulk loading and packaging facilities can comply with 326 IAC 6-3.

Appendix A: Emissions Calculations

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Combustion Emissions

Raw Mill and Kilns

Company Name: Lehigh Portland Cement Company
Address City IN Zip: 121 North First Street, Mitchell, IN 47446
Title V No.: T093-5990-00002
Pit ID: 093-00002
Reviewer: Nisha Sizemore

A. Raw Mill Coal-Fired Stoker

Heat Input Capacity MMBtu/hr	Potential Throughput tons/year	Limited Throughput tons/year	S = Weight % Sulfur 2.6	A = Weight % Ash 13
37	*****	505		

Emission Factor in lb/ton	Pollutant					
	PM	PM10	SO2	NOx	VOC	CO
	66.0	13.2	98.8 (38S)	22.0	0.05	5.0
Potential Emission in tons/yr	438.4	87.7	656.2	146.1	0.3	33.2
Limited Emission in tons/yr	16.7	3.3	24.9	5.6	0.0	1.3

B. Natural Gas-Fired Raw Mills

Heat Input Capacity MMBtu/hr	Potential Throughput MMCF/yr						
40.0	350.4						
	PM	PM10	SO2	NOx	VOC	CO	Lead
Emission Factor in lb/MMCF	7.6	7.6	0.6	100.0	5.5	84.0	0.0005
Potential Emission in tons/yr	1.3	1.3	0.1	17.5	1.0	14.7	0.0

C. Kilns

Heat Input Capacity MMBtu/hr	Potential Throughput tons/year	S = Weight % Sulfur 2.6	A = Weight % Ash 13			
354	127091.80					
Emission Factor in lb/ton	Pollutant					
	PM 66.0	PM10 13.2	SO2 98.8 (38S)	NOx 22.0	VOC 0.05	CO 5.0
Potential Emission in tons/yr	4194.0	838.8	6278.3	1398.0	3.2	317.7

Methodology

1 pound of bituminous coal has a heating value of 12,200 Btu
1 cubic foot of natural gas has a heating value of 1,020 Btu
Potential Throughput (tons/year) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr / 2000 lbs/ton / Heating Value
Coal Combustion Emission Factors are from AP 42, Tables 1.1-3, 1.1-4, and 1.1-19.
Natural Gas Combustion Emission Factors are from AP42, Tables 1.4-1 and 1.4-2.
Emission (tons/yr) = Throughput (tons/ yr) x Emission Factor (lb/ton) / 2,000 lb/ton

Appendix A: Emissions Calculations
Natural Gas Combustion
HAP Emissions

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Company Name: Lehigh Portland Cement Company
Address City IN Zip: 121 North First Street, Mitchell, IN 47446
Title V No.: T093-5990-00002
Plt ID: 093-00002
Reviewer: Nisha Sizemore

Potential Throughput
(MMCF/yr)

350.4

HAP	Emission Factor (lbs/MMCF)	Emissions	
		(lbs/yr)	(tons/yr)
2-Methylnaphthalene	2.40E-05	0.01	0.00
3-Methylchloranthrene	1.80E-06	0.00	0.00
7,12-Dimethylbenz(a)anthracene	1.60E-05	0.01	0.00
Acenaphthene	1.80E-06	0.00	0.00
Acenaphthylene	1.80E-06	0.00	0.00
Anthracene	2.40E-06	0.00	0.00
Arsenic Compounds	2.00E-04	0.07	0.00
Benz(a)anthracene	1.80E-06	0.00	0.00
Benzene	2.10E-03	0.74	0.00
Benzo(a)pyrene	1.20E-06	0.00	0.00
Benzo(b)fluoranthene	1.80E-06	0.00	0.00
Benzo(g,h,i)perylene	1.20E-06	0.00	0.00
Benzo(k)fluoranthene	1.80E-06	0.00	0.00
Beryllium Compounds	1.20E-05	0.00	0.00
Cadmium Compounds	1.10E-03	0.39	0.00
Chromium Compounds	1.40E-03	0.49	0.00
Chrysene	1.80E-06	0.00	0.00
Cobalt Compounds	8.40E-05	0.03	0.00
Dibenzo(a,h)anthracene	1.20E-06	0.00	0.00
Dichlorobenzene	1.20E-03	0.42	0.00
Fluoranthene	3.00E-06	0.00	0.00
Fluorene	2.80E-06	0.00	0.00
Formaldehyde	7.50E-02	26.28	0.01
Hexane	1.80E+00	630.72	0.32
Indeno(1,2,3-cd)pyrene	1.80E-06	0.00	0.00
Manganese Compounds	3.80E-04	0.13	0.00
Mercury Compounds	2.60E-04	0.09	0.00
Naphthalene	6.10E-04	0.21	0.00
Nickel Compounds	2.10E-03	0.74	0.00
Phenanthrene	1.70E-05	0.01	0.00
Pyrene	5.00E-06	0.00	0.00
Selenium Compounds	2.40E-05	0.01	0.00
Toluene	3.40E-03	1.19	0.00
TOTAL HAPs		661.54	0.33

METHODOLOGY

Potential Emissions (tons/yr) = Potential Throughput (MMCF/yr) x Emission Factor (lbs/MMCF) / 2000 lbs/ton
Emission Factors are from AP 42, Tables 1.4-3 and 1.4-4.

Appendix A: Emissions Calculations
Coal Combustion
HAP Emissions

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Company Name: Lehigh Portland Cement Company
Address City IN Zip: 121 North First Street, Mitchell, IN 47446
Title V No.: T093-5990-00002
Pit ID: 093-00002
Reviewer: Nisha Sizemore

Potential Throughput
(tons/yr)

140375.41

HAP	Emission Factor (lbs/ton)	Emissions (lbs/yr) (tons/yr)		HAP	Emission Factor (lbs/ton)	Emissions (lbs/yr) (tons/yr)	
Acetaldehyde	5.70E-04	80.01	0.04	Ethylene dichloride	4.00E-05	5.62	0.00
Acetophenone	1.50E-05	2.11	0.00	Formaldehyde	2.40E-04	33.69	0.02
Acrolein	2.90E-04	40.71	0.02	Hexane	6.70E-05	9.41	0.00
Antimony Compounds	1.80E-05	2.53	0.00	Isophorone	5.80E-04	81.42	0.04
Arsenic Compounds	4.10E-04	57.55	0.03	Lead Compounds	4.20E-04	58.96	0.03
Benzene	1.30E-03	182.49	0.09	Manganese Compounds	4.90E-04	68.78	0.03
Benzyl chloride	7.00E-04	98.26	0.05	Mercury Compounds	8.30E-05	11.65	0.01
Beryllium Compounds	2.10E-05	2.95	0.00	Methyl bromide	1.60E-04	22.46	0.01
Biphenyl	1.70E-06	0.24	0.00	Methyl chloride	5.30E-04	74.40	0.04
Bis(2-ethylhexyl)phthalate	7.30E-05	10.25	0.01	Methyl ethyl ketone	3.90E-04	54.75	0.03
Bromoform	3.90E-05	5.47	0.00	Methyl hydrazine	1.70E-04	23.86	0.01
Cadmium Compounds	5.10E-05	7.16	0.00	Methyl methacrylate	2.00E-05	2.81	0.00
Carbon disulfide	1.30E-04	18.25	0.01	Methyl tert butyl ether	3.50E-05	4.91	0.00
2-Chloroacetophenone	7.00E-06	0.98	0.00	Methylene chloride	2.90E-04	40.71	0.02
Chlorobenzene	2.20E-05	3.09	0.00	Naphthalene	1.30E-05	1.82	0.00
Chloroform	5.90E-05	8.28	0.00	Nickel Compounds	2.80E-04	39.31	0.02
Chromium Compounds	3.40E-04	47.73	0.02	Phenol	1.60E-05	2.25	0.00
Cobalt Compounds	1.00E-04	14.04	0.01	Propionaldehyde	3.80E-04	53.34	0.03
Cumene	5.30E-06	0.74	0.00	Selenium Compounds	1.30E-03	182.49	0.09
Cyanide	2.50E-03	350.94	0.18	Styrene	2.50E-05	3.51	0.00
2,4-Dinitrotoluene	2.80E-07	0.04	0.00	Tetrachloroethylene	4.30E-05	6.04	0.00
Dimethyl sulfate	4.80E-05	6.74	0.00	Toluene	2.40E-04	33.69	0.02
Ethyl benzene	9.40E-05	13.20	0.01	1,1,1-Trichloroethane	2.00E-05	2.81	0.00
Ethyl chloride	4.20E-05	5.90	0.00	Xylenes	3.70E-05	5.19	0.00
Ethylene dibromide	1.20E-06	0.17	0.00	Vinyl acetate	7.60E-06	1.07	0.00

METHODOLOGY

TOTAL HAPs 1784.74 0.89

Potential Emissions (tons/yr) = Potential Throughput (tons/yr) x Emission Factor (lbs/ton) / 2000 lbs/ton
Emission Factors are from AP 42, Tables 1.1-12, 1.1-13, and 1.1-17.

Appendix A: Emissions Calculations
Cement Kiln Operations
HAP Emissions

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Company Name: Lehigh Portland Cement Company
Address City IN Zip: 121 North First Street, Mitchell, IN 47446
Title V No.: T093-5990-00002
Pit ID: 093-00002
Reviewer: Nisha Sizemore

Potential Throughput
(tons/yr)

1042440

HAP	Emission Factor (lbs/ton)	Emissions (lbs/yr) (tons/yr)		HAP	Emission Factor (lbs/ton)	Emissions (lbs/yr) (tons/yr)	
Arsenic Compounds	1.30E-05	13.55	0.01	Lead Compounds	7.10E-04	740.13	0.37
Benzene	3.10E-03	3231.56	1.62	Manganese Compounds	8.60E-04	896.50	0.45
Cadmium Compounds	8.30E-06	8.65	0.00	Mercury Compounds	2.20E-04	229.34	0.11
Carbon disulfide	1.10E-04	114.67	0.06	Methylene chloride	4.90E-04	510.80	0.26
Chlorobenzene	1.60E-05	16.68	0.01	Naphthalene	2.20E-04	229.34	0.11
Chromium Compounds	7.70E-06	8.03	0.00	Phenol	1.10E-04	114.67	0.06
Ethyl benzene	1.90E-05	19.81	0.01	Styrene	1.50E-06	1.56	0.00
Formaldehyde	4.60E-04	479.52	0.24	Toluene	1.90E-04	198.06	0.10
Hydrogen Chloride	4.90E-02	51079.56	25.54	Xylenes	1.30E-04	135.52	0.07

METHODOLOGY

TOTAL HAPs 58027.94 29.01

Potential Emissions (tons/yr) = Potential Throughput (tons/yr) x Emission Factor (lbs/ton) / 2000 lbs/ton
Emission Factors are from AP 42, Tables 11.6-9.

Subpart F

Affected Facilities include kilns, coolers, raw mill system, finish mill system, raw mill dryer, raw material storage, clinker storage, finished product storage, conveyor transfer points, bagging and bulk loading and unloading systems.

Date: August 17, 1971

Exemptions: any facility preceding raw material storage, just prior to raw mill.

1st affected facility is raw material storage, just prior to raw mill; therefore, quarry operations, raw material stockpiles, and raw material sizing facilities are not affected facilities.

Subpart OOO

Affected facilities: crusher, grinding mill, screening operation, bucket elevator, belt conveyor, bagging operation, storage bin, enclosed truck or railcar loading station.

If subject to Subpart F, then exempt from Subpart OOO.

Date: August 31, 1983

Subpart Y

coal prep plants includes coal breaking, crushing, screening, wet or dry cleaning, and thermal drying. coal conveyors, storage facilities (except open piles) and coal transfer and loading systems are applicable.

Date: October 24, 1974

Exemptions: any coal conveyors used to transport coal to the kilns, if the conveyors are already subject to the NESHAP Subpart LLL are exempt from Subpart Y.

Subpart LLL

Exemptions: any facility preceding raw material storage, just prior to raw mill.

1st affected facility is raw material storage, just prior to raw mill; therefore, quarry operations, raw material stockpiles, and raw material sizing facilities are not affected facilities.

CKD operations are not affected facilities.

Haul roads and open/unenclosed storage piles are not affected facilities.

Summary of Applicability Determinations

Emission Unit Description	Emission Unit ID	Date of Construction	NSPS Subpart OOO Aug 31, 1983	NSPS Subpart Y Oct 24, 1974	NSPS Subpart F Aug 17, 1971	NESHAP Subpart LLL
Quarry Activities						
drilling, blasting, hauling, handling & storage	F01	pre-1971	Not applicable because pre-dates rule	not affected facilities	not affected facilities	not affected facilities
Quarry Material Sizing Facilities						
primary crusher	EU01	1965	Not applicable because pre-dates rule	not affected facilities	not affected facilities	not affected facilities
surge bin and transfer system	EU02	1965	Not applicable because pre-dates rule	not affected facilities	not affected facilities	not affected facilities
secondary crusher	EU03	1965	Not applicable because pre-dates rule	not affected facilities	not affected facilities	not affected facilities
tertiary crusher	EU04	1965	Not applicable because pre-dates rule	not affected facilities	not affected facilities	not affected facilities
north screen house	EU05	1965	Not applicable because pre-dates rule	not affected facilities	not affected facilities	not affected facilities
south screen house	EU06	1965	Not applicable because pre-dates rule	not affected facilities	not affected facilities	not affected facilities
belt 7 to belt 8 conveyor transfer pt	EU07	1965	Not applicable because pre-dates rule	not affected facilities	not affected facilities	not affected facilities
belt 8 to belt 9 conveyor transfer pt	EU08	1965	Not applicable because pre-dates rule	not affected facilities	not affected facilities	not affected facilities

Emission Unit Description	Emission Unit ID	Date of Construction	NSPS Subpart OOO Aug 31, 1983	NSPS Subpart Y Oct 24, 1974	NSPS Subpart F Aug 17, 1971	NESHAP Subpart LLL
belt 9 to belt 10 conveyor transfer pt	F02	1965	Not applicable because pre-dates rule	not affected facilities	not affected facilities	not affected facilities
CKD storage, disposal, mining, & handling facilities						
CKD bin	EU24	1959	not affected facilities	not affected facilities	not affected facilities	not affected facilities
CKD truck unloading	EU24A	1959	not affected facilities	not affected facilities	not affected facilities	not affected facilities
CKD mixer	EU24B	1959	not affected facilities	not affected facilities	not affected facilities	not affected facilities
CKD truck loadout	F07	1999	not affected facilities	not affected facilities	not affected facilities	not affected facilities
CKD disposal & mining facilities	F05	1999	not affected facilities	not affected facilities	not affected facilities	not affected facilities
Raw Material Handling and Storage Facilities						
conveying system	EU09	1960	Not applicable because pre-dates rule	not affected facilities	Not applicable because pre-dates rule	not affected facilities, preceeds raw matl storage
shale crusher	EU10	1961	Not applicable because pre-dates rule	not affected facilities	not affected facilities	not affected facilities, preceeds raw matl storage
material storage bldg	F03	1959-1960	Not applicable because pre-dates rule	not affected facilities	Not applicable because pre-dates rule	YES
coal unloading bldg		1960	Not applicable because pre-dates rule	Not applicable because pre-dates rule	not affected facilities	YES
coal pile	F04	pre-1971	Not applicable because pre-dates rule	Not applicable because pre-dates rule	not affected facilities	not affected facilities

Emission Unit Description	Emission Unit ID	Date of Construction	NSPS Subpart OOO Aug 31, 1983	NSPS Subpart Y Oct 24, 1974	NSPS Subpart F Aug 17, 1971	NESHAP Subpart LLL
raw material stockpiles	F09	pre-1971	Not applicable because pre-dates rule	not affected facilities	Not applicable because pre-dates rule	not affected facilities
Raw Mill Facilities						
coal-fired stoker (exhausts to raw mill)	EU11A and EU12A	1999 and 1977 respectively	not affected facilities	not affected facilities	no, permit limit requires that emissions would not increase above previous levels	YES
raw mill #1	EU11	1961	not affected facilities	not affected facilities	Not applicable because pre-dates rule	YES
raw mill #2	EU12	1961	not affected facilities	not affected facilities	Not applicable because pre-dates rule	YES
Raw Mill Storage Facilities						
blending bins	EU13	1961	not affected facilities	not affected facilities	Not applicable because pre-dates rule	YES
kiln supply silos	EU14	1961	not affected facilities	not affected facilities	Not applicable because pre-dates rule	YES
kiln feed bin #1	EU18	1959	not affected facilities	not affected facilities	Not applicable because pre-dates rule	YES
kiln feed bin #2	EU20	1959	not affected facilities	not affected facilities	Not applicable because pre-dates rule	YES
kiln feed bin #3	EU22	1974	not affected facilities	not affected facilities	YES	YES
Clinker Handling Facilities						
south storage drag	EU25	1974	not affected facilities	not affected facilities	no, conveyor was only replaced in 1974, transfer pt existed prior to applicability date	YES, conveyor transfer points only
north clinker tower	EU26a	1959	not affected facilities	not affected facilities	Not applicable because pre-dates rule	YES, conveyor transfer points only

Emission Unit Description	Emission Unit ID	Date of Construction	NSPS Subpart OOO Aug 31, 1983	NSPS Subpart Y Oct 24, 1974	NSPS Subpart F Aug 17, 1971	NESHAP Subpart LLL
north storage drag	EU26b	1959	not affected facilities	not affected facilities	Not applicable because pre-dates rule	YES, conveyor transfer points only
scrap bin clinker ladder (flap used to reduce drop ht) ¹	EU26c	1993	not affected facilities	not affected facilities	not affected facilities	not affected facilities
south clinker tower	EU27	1974	not affected facilities	not affected facilities	YES, conveyor transfer points only	YES, conveyor transfer points only
hot spout clinker ladder (flap used to reduce drop ht) ²	EU28	1993	not affected facilities	not affected facilities	not affected facilities	not affected facilities
pan clinker conveyor	EU29	1979	not affected facilities	not affected facilities	no, conveyor was only replaced in 1979, transfer pt existed prior to applicability date	YES, conveyor transfer points only
east clinker ladder (flap used to reduce drop ht) ³	EU30	1993	not affected facilities	not affected facilities	not affected facilities	not affected facilities
roll crusher	EU31	1987	not affected facilities	not affected facilities	YES	YES
Finish Mill Facilities						
finish mill #1	EU32	1959	not affected facilities	not affected facilities	Not applicable because pre-dates rule	YES
finish mill #2	EU33	1959	not affected facilities	not affected facilities	Not applicable because pre-dates rule	YES
finish mill #3	EU34	1959	not affected facilities	not affected facilities	Not applicable because pre-dates rule	YES
finish mill #4 & feed bin	EU35	1974	not affected facilities	not affected facilities	YES	YES
finish mill #4 separator	EU36	1989	not affected facilities	not affected facilities	YES	YES
lime bin	EU38	1993	not affected facilities	not affected facilities	YES	YES

Emission Unit Description	Emission Unit ID	Date of Construction	NSPS Subpart OOO Aug 31, 1983	NSPS Subpart Y Oct 24, 1974	NSPS Subpart F Aug 17, 1971	NESHAP Subpart LLL
Finish Material Storage Facilities						
surge bin	EU37	1959	not affected facilities	not affected facilities	Not applicable because pre-dates rule	YES
north and south silo operation	EU39A and EU39B	1959	not affected facilities	not affected facilities	Not applicable because pre-dates rule	YES
silo transfer system	EU40A and EU40B	1959	not affected facilities	not affected facilities	Not applicable because pre-dates rule	YES
Bulk Loading & Packaging Facilities						
east truck loadout bin	EU41	1959	not affected facilities	not affected facilities	Not applicable because pre-dates rule	YES
east truck vacuolader	EU42	1959	not affected facilities	not affected facilities	Not applicable because pre-dates rule	YES
west truck loadout bin	EU43	19859	not affected facilities	not affected facilities	Not applicable because pre-dates rule	YES
west truck vacuolader	EU44	1959	not affected facilities	not affected facilities	Not applicable because pre-dates rule	YES
truck loadout station	F06	1959	not affected facilities	not affected facilities	Not applicable because pre-dates rule	YES
railroad loadout bin	EU45	1959	not affected facilities	not affected facilities	Not applicable because pre-dates rule	YES
articulolader	EU46	1959	not affected facilities	not affected facilities	Not applicable because pre-dates rule	YES
packing machine	EU47	1984	not affected facilities	not affected facilities	YES	YES
Kiln Facilities						
kiln #1	EU15	1959	not affected facilities	not affected facilities	Not applicable because pre-dates rule	YES

Emission Unit Description	Emission Unit ID	Date of Construction	NSPS Subpart OOO Aug 31, 1983	NSPS Subpart Y Oct 24, 1974	NSPS Subpart F Aug 17, 1971	NESHAP Subpart LLL
kiln #2	EU16	1959	not affected facilities	not affected facilities	Not applicable because pre-dates rule	YES
kiln #3	EU17	1974	not affected facilities	not affected facilities	YES	YES
Clinker Cooler Facilities						
clinker cooler #1	EU19	1959	not affected facilities	not affected facilities	Not applicable because pre-dates rule	YES
clinker cooler #2	EU21	1959	not affected facilities	not affected facilities	Not applicable because pre-dates rule	YES
clinker cooler #3	EU23	1974	not affected facilities	not affected facilities	YES	YES
Miscellaneous Facilities						
coal mills			not affected facilities	not affected facilities because emissions exhaust to kilns	not affected facilities	not affected facilities

1. The scrap bin clinker ladder (EU26c), the hot spout clinker ladder (EU28), and the east clinker ladder (EU30) are not emission units; they are flaps which are used to reduce drop heights from conveyor transfer points, which reduce the particulate emissions.
2. Same as endnote #2.
3. Same as endnote #2.